Lectures
ON THE
PHYSICAL EXAMINATION OF THE MOUTH AND THROAT.

Delivered to the Junior Class of Clinical Medicine, University College,

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LECTURE IV.

THE LARYNX AND THE USE OF THE LARYNGOSCOPE.

GENTLEMEN,—We have now discussed all those objective phenomena of the mouth and fauces which are appreciable to our unaided senses. It is always my custom to advise you to trust as much as possible to your unaided senses, and always to make a point of learning as much as possible about a patient without having recourse to those various "scopes" which students are very prone to regard not merely as valuable accessory aids to our senses, but as absolutely indispensable for the acquisition of any knowledge at all.

You will find that it is quite possible to learn a great deal about the larynx without looking at it at all, and that alterations in voice, respiration, and swallowing, combined with palpation, may teach us a great deal. For convenience sake, however, we will depart from our rule of considering all simple means of investigation before the instrumental means, and proceed at once to speak of the laryngoscope.

The laryngoscope, an instrument for obtaining a view of the larynx, is a modern invention. Mirrors for illuminating the throat had been used in an unmethodical manner for many years, when Signor Garcia, a singing master, presented a paper to the Royal Society in 1854, on the Physiology of the Vocal Cords, based upon an examination of his own vocal apparatus by means of a laryngoscope. In 1857, Türck of Vienna, and Czermak of Pesth—especially the latter,—succeeded in bringing the laryngoscope to the general notice of the profession.

I shall not detain you many minutes with directions for using the instruments; that is a practical matter, and a very little practice will make you a proficient in the art. To use the laryngoscope aright is a far easier thing to learn than to use the stethoscope or ophthalmoscope. The laryngoscope consists of a mirror worn by the observer, by means of which a strong light is reflected to the back of the pharynx, and there again reflected downwards to the larynx by means of a second and a smaller mirror, upon which an image of the larynx becomes visible. A few words may be added in amplification of this.

1. As to the source of light. The best of all is the sun; and whenever you can get the chance of doing so, place your patient in a chair, with his back to a window, and reflect the rays of the sun directly into his throat. Failing the sun, an Argand gas-burner, or, better still, a mineral-oil lamp, with either a flat or a circular flame (I prefer the latter), form excellent sources of light for this purpose; and as the one or the other exist in every house, you should accustom yourselves to use them. An ordinary gas-flame, or even a candle, will answer the purpose. No lenses or condensers are necessary, and you may have observed that I never use either the one or the other. I strongly advise you not to get in the habit of using cumbrous and expensive apparatus, which you may not be able to obtain when most needed, and which really hinder that training of the senses, after which we should all strive. Some persons prefer a direct illumination of the pharynx, but you will find it generally most convenient to place your source of light a little behind and to one side of the patient, and then to reflect the light into the throat, exactly as a schoolboy uses a bit of looking-glass for the purpose of throwing a light into someone's face.

2. The reflector may be mounted on an india-rubber band or a spectacle frame, and it must be perforated in the centre, and be movable in all directions upon a ball-and-socket joint. The reflector is best worn over one eye, the operator using the central perforation for the purposes of vision.

3. The laryngeal mirrors vary in size from a sixpence to a florin, and are mounted on slender handles. The handle and the mirror should form an angle of about 120°, and the handle should be sufficiently pliable to admit of this angle being varied at the pleasure of the observer.

A few words as to the method of using the instrument. Let the patient sit facing you, with the knees together, on an ordinary chair, and with the illuminating lamp upon a table, or otherwise suitably supported, just behind and to one side of him, the flame being about on a level with his ear. Sit immediately opposite the patient, and ask him to sit quite upright, with the head a little thrown back. Tell him to open the mouth, and then adjust the reflector, so that the light is thrown upon the pharyngeal wall, the uvula, and the arches of the palate. Ask him to protrude the tongue fully, and then *gently* and neatly wrapping the end of it in a smooth fold of a soft small napkin, take the tip *gently* between the thumb and forefinger of the left hand, and retain the tongue in its protruded position with the least possible amount of pressure, and absolutely without anything like forcible traction. If the second finger of the left hand be passed beneath the patient's chin, any unintentional wandering of the hand is prevented.

Be sure and use all gentleness in these manipulations. Anything like force leads to struggling on the part of the patient's tongue and to spasms of the pharynx, and is fatal to your object. Next, take a laryngeal mirror of suitable size and hold it lightly, like a pen, in the right hand. Many students hold the mirror too tightly, and with the end of the handle touching the palm of the hand. Held in this position it is impossible to alter the direction of the mirror without moving the entire hand and wrist. If it be held like a pen, the mirror can be moved freely in all directions simply by the movement of the tips of the thumb and first two fingers.

The mirror must be warmed before being introduced into the mouth to prevent the condensation of moisture upon its surface. This end may be attained also by smearing the surface of the mirror with glycerine and water, but heating is a better plan, as, being cleaner and simpler, and likely to lessen instead of increase the risk of any carriage of infecting particles from one patient to another. In passing the mirror to the back of the mouth follow the natural curves of the mouth, and pass the mirror over the dorsum of the tongue without touching it. If skilfully passed the mirror should touch nothing until the edge of the soft palate is reached, when the uvula should be gently pushed upwards upon the back of the mirror. Then if the patient be asked to take a deep breath a complete image of the larynx is obtained.

In a favourable case there is really no difficulty whatever in doing what I have described. You will find, however, many patients who are very intolerant of any manipulation of the mouth or throat, and the mere *idea* of the examination is enough to make them double up their tongues, contract the pharynx, retch, and even vomit. In such cases you must be doubly careful not to touch the mouth, and particularly to avoid irritating the posterior pharyngeal wall. It is a good plan to keep such patients occupied and to make them inspire and expire deeply and frequently during the whole period of examination, and to utter sounds, such as "Ah" or "Eh." When asked to "take a deep breath" many of the irritable patients do nothing of the kind, but merely contract the pharynx and hold the breath. It is often necessary to teach them what is wanted to be done. The irritability of the throat may be lessened by sucking ice. The bromide of potassium administered for a few days in doses of ten or fifteen grains will diminish the irritability in a very remarkable manner. Great irritability of the throat is natural to some people, but in the great majority it is indicative of gastric hyperæmia, and is especially observable in people who indulge in alcoholic stimulants. In such cases the combination of Epsom salts with the bromide is very useful.

But now let us suppose that the laryngeal mirror is successfully placed *in situ*. What do you see reflected in the mirror?

At the top of the mirror is seen the epiglottis; at the bottom are seen the two prominences caused by the tips of the arytenoid cartilages, or rather by the cartilages of Santorini which surmount them. Between the edges of the epiglottis and the cartilages of Santorini are two folds of mucous mem-

brane called the aryteno-epiglottic folds, and during deep inspiration a fold of mucous membrane is observed stretching between the arytenoid cartilages and forming the posterior wall of the larynx. The parts I have named form a frame, as it were, and in it are seen the pearly white vocal cords, stretching like an inverted Λ from the epiglottis (apparently), where is the apex of the triangle, to the arytenoid cartilages, where is the base. Between the vocal cords and below them may be seen a transverse striation caused by the rings on the anterior wall of the trachea, and in very favourable cases a glimpse may be caught of the division of the trachea into right and left bronchus. Between the aryteno-epiglottic fold and the vocal cord on either side is seen the red mucous surface of the ventricular band or false vocal cord.

These appearances differ at different times. During deep inspiration the arytenoid cartilages are separated by a third of an inch or more, the inter-arytenoid membrane is well seen, and the triangle formed by the separated vocal cords is very evident. During phonation, however, when the patient is made to say "Ah," the arytenoid cartilages and the vocal cords are brought close together, and the rima glottidis is almost completely shut.

It may be well to mention that healthy larynges differ considerably in appearance, and the shape of the epiglottis is as varied as is the shape of the ear or nose in different individuals. It may be well to mention also that in a certain very small percentage of cases the epiglottis is so pendulous as completely to obscure the larynx.

I must remind you that the image which you see in the laryngeal mirror is a reflected one; and just as in an ordinary looking-glass the right hand of the spectator becomes the apparent left of the image, so the parts of the image of the larynx which are to the observer's right hand are in reality those which are on the left side of the patient's larynx. Remember also that the upper part of the image, the epiglottis and the apex of the triangle formed by the vocal cords—the parts which seem furthest off—are those which form the anterior wall of the larynx, while the bottom part of the image is formed by the posterior laryngeal wall. It is very important to remember this when you come to make applications to the larynx.

I may mention that the laryngeal mirror is useful as enabling one to get a good view not only of the larynx, but of the base of the tongue—the papillæ circumvallatæ and the parts beyond, and the glosso-epiglottic fossa. It enables us also better to explore the pharynx and the arches of the teeth.

The diseased appearances of the larynx are in kind similar to those which are seen in the pharynx.

Hyperæmia is very easily produced by any irritant. In the rapidity with which hyperæmia may be brought about the larynx resembles the conjunctiva, and a particle of food or dust will cause a general distension of the vessels, and a swelling of the mucous membrane almost instantaneously. If the irritant be a powerful one, such as boiling water, the hyperæmia may cause œdema, and the swelling may be so great as to produce suffocation and death in a very short time.

Hyperæmia is not only brought about by direct irritation of solid particles, but by over-use of the larynx in talking or incessant coughing, exposure to cold, and atmospheres laden with solid particles either in workshops or in London fogs, by the too frequent use of strong drinks, and by gastric irritation however induced. It is seen also in certain constitutional states, such as syphilis, gout, and consumption. The hyperæmia may affect any part. When it affects the vocal cords they lose their pearly-white shining appearance, and look very often as if a very thin layer of treacle were smeared over them, or possibly tiny vessels may be actually visible upon their white surface.

Anæmia of the larynx is present as a part of general anæmia. Occasionally the anæmia of the larynx is greater than that of other parts, and I have seen cases where the pallor of the larynx has been very great, while no very obvious signs of anæmia existed elsewhere. Such anæmia of the larynx is generally accompanied by some impairment of function, and is said to be a precursor of laryngeal phthisis. I can call to mind four cases, at least, in which the anæmia of the larynx was a very marked feature. One was in a girl, who had signs of locomotor ataxia combined with paralysis of the palate; another was in a medical student with a sluggish follicular ulceration of the larynx, and in whose family there was a well-marked tendency to phthisis; a third was in a boy who had been seized with aphonia during convalescence from measles, and a fourth was in another boy, who was recovering from an attack of whooping-cough.

In *inflammation of the larynx* there are the usual objective signs of inflammation—viz., redness and swelling. In acute laryngitis the swelling may be enormous. The epiglottis may be two or three times its natural size, and the aryteno-epiglottic folds may be distended to such an extent as to obscure the false cords and the glottic chink. The parts may be dry on the surface, and of a fiery redness, or, as is more often the case, they are bathed in muco-pus. In such a condition the patient is in imminent danger of his life, and presents all the symptoms of one who is in fear of immediate suffocation. Between these extreme appearances of inflammation and a mere thickening and slight discoloration of the cords there is, of course, every degree of redness and of swelling. Acute laryngitis is liable to occur from exposure to cold, or from direct injury to the part. In children it is known as catarrhal croup, and in adults it is liable to come on after the acute specifics, or during an attack of erysipelas. If there be any disease of the kidneys, the œdema in these cases is apt to be alarmingly great.

As a result of acute laryngitis abscesses may form in the submucous tissue, and then, when the general redness and swelling is subsiding, a smooth globular elastic swelling is left at one spot. A great cause of laryngeal abscess is necrosis of the laryngeal cartilages which is liable to occur as a result of laryngitis, and especially after typhus and other exhausting fevers, and in tubercular and syphilitic disease. The arytenoid cartilages are most often affected, and then we find a globular elastic swelling at the posterior part of one or other of the aryteno-epiglottic folds. Next to the arytenoids the cricoid is most prone to suffer, and the resulting abscess may either form a projection into the larynx beneath the vocal cords, or it may project backwards into the œsophagus, and in doing so interfere with swallowing and with the function of the muscles which cover the posterior surface of the cricoid. The thyroid is occasionally, but not often, the seat of necrosis and resulting abscess.

Chronic laryngitis presents symptoms the same in kind as are seen in acute laryngitis, but usually more localised; and we find that the epiglottis, the aryteno-epiglottic folds, the false cords, or the true cords themselves, are mainly affected.

We may find that the only sign of laryngitis is a very slight thickening and redness of the vocal cords just at the point where the elastic cord joins the processus vocalis of the arytenoid cartilage, and this is a point to which the practical man will specially direct his attention. During phonation, when the arytenoid cartilages rotate inwards, the tips of the processus vocales impinge against each other, and this constantly-recurring shock is enough to determine the inflammatory action to this spot.

There are three great constitutional causes which determine the chronicity of a laryngitis or laryngeal catarrh. These are syphilis, phthisis, and alcoholism. Two of these causes are often combined, and occasionally all three. Now it is important to consider whether, *from the appearance of the larynx alone*, one can tell which of these causes is present. There may be simple diffused redness of the larynx, and then it is quite impossible to say to what cause it is due, and your opinion will be formed entirely by the concomitant symptoms.

Syphilis will cause swelling of the mucous membrane, accompanied by mucous patches and superficial ulceration exactly similar to the appearances which I have described as occurring in the pharynx, and seeing these the practised eye will recognise their cause at once. Gummata may grow in the mucous membrane here, and that uniform syphilitic infiltration which we have noticed as occurring in the tongue and pharynx may also take place in the larynx, causing great swelling of the epiglottis, false cords, and the aryteno-epiglottic folds, and occasionally swelling also of the parts beneath the true cords. As a general rule, it may be said that in the syphilitic conditions the mucous membrane is not of a very deep tint, and the parts look harder. I am in the habit of saying that, when the appearance of the swollen mucous membrane reminds me of a "white-heart" cherry, I suspect syphilis, but when I am reminded of a ripe strawberry I suspect some other cause (often phthisis) for the catarrhal condition. The infiltration of syphilis may produce complete occlusion of the glottis. Sloughing and contraction of the parts may occur, and so much distortion as to render them scarcely recognisable.

The epiglottis may be completely destroyed, or may appear notched and crumpled, and unequally thickened.

With regard to "laryngeal phthisis," as it has been called, Von Ziemssen says, "Neither the catarrh nor the ulceration of phthisical subjects presents any characteristic signs by which it could be recognised as such." This is perfectly true, and my experience enables me to endorse this assertion. It may be said, however, that in laryngeal catarrh of phthisical origin the mucous membrane looks red and soft, like an over-ripe strawberry, and often the glandules of the part, being swollen, increase the resemblance to the texture of the strawberry. There are especially two parts which are very liable to be attacked in phthisis—viz., the epiglottis and the posterior parts of the aryteno-epiglottic folds. When we see the epiglottis fiery red, puffy and granular, and bathed in muco-pus; and when we see the so-called pyriform swelling over the arytenoid cartilages, with the big ends of the pear-shaped masses touching behind and the thin ends stretching towards the sides of the epiglottis; when these pear-shaped masses look red and granular, and when we see muco-pus welling up between them, we have very strong grounds for suspecting phthisis as a cause of the condition. Many of you, however, may have seen a patient whose condition was to the eye most suggestive of phthisis, but whose recovery was only brought about by active mercurialisation, and the occurrence of such cases should make one careful not to jump to conclusions.

Alcoholic laryngitis has nothing very characteristic about it, although I fancy that the epiglottis is the part most generally attacked.

In all cases of chronic laryngeal catarrh your conclusions as to the cause must be largely drawn from the concomitant symptoms. The laryngeal appearances may or may not be highly suggestive; but an alcoholic smell in the breath, combined with a bloated countenance; or the characteristic anæmic condition seen in syphilis combined with pharyngeal syphilis; or emaciation, rapid breathing, a hectic flush, and a flattened chest, will generally serve to confirm or correct the opinion which an inspection of the larynx has led you to take.

Ulceration of the larynx is commonly present in two conditions—viz., syphilis and phthisis. In both it may be very extensive, and may occur at any part—on the epiglottis, the false or true cords, the aryteno-epiglottic folds, or the inter-arytenoid space. The ulceration is very similar in both conditions. In phthisis the seat of the ulceration is very apt to be the tip of the processus vocalis, or the part of the laryngeal wall between the arytenoid cartilages, or the surface of the swollen and reddened mucous membrane covering the arytenoid cartilages. In laryngeal phthisis the swollen and ulcerated condition of the posterior part of the aryteno-epiglottic folds often occasions very great difficulty in swallowing.

Adventitious Growths.—In croup and diphtheria a false membrane grows upon the laryngeal mucous membrane similar to that which is seen on the pharyngeal. "Thrush" may affect this part, and we may find patches of oidium albicans. Occasionally cancer, usually of the epithelial type, attacks the larynx, and when it does so it is almost always by spreading from the œsophagus. The appearances are the same as those caused by epithelioma elsewhere—thickening and infiltration of the part, with ulceration and a foul unhealthy surface. Here there is no attempt, as in syphilis, to cicatrisation and repair, and the act of destruction is continuous. In the late stages diagnosis is easy, but in the early stages it is difficult. The concomitant symptoms and the microscopic appearance of expectorated matter are great aids in forming a diagnosis.

New growths of a simple character in the larynx, forming tumours upon the laryngeal mucous membrane, are not uncommon. In all cases of prolonged laryngeal catarrh the mucous membrane is apt to become thickened and nodular, and may project into the laryngeal cavity. Such mucous projections, although they may prove tempting objects of attack to aspirants for fame, are in no sense new growths, and do not often call for any surgical interference. We have recently seen in the Throat Department a good example of a simple laryngeal tumour—viz., a globular round-celled sarcoma, as big as a hazel-nut, growing by a broad base from the anterior part of the left ventricular band or false cord. The most common among these formations are papillomata, or warts and fibromata or polypi. These tumours seem to have their origin in hyperæmia of the mucous membrane, however brought about. Occasionally there is a syphilitic history. They may grow from any part of the laryngeal mucous membrane, true or false cords, the aryteno-epiglottic folds, or the inter-arytenoid space, and the laryngoscope enables us to see their exact position and their naked eye appearance, whether warty or polypoid. The diagnosis of these conditions is impossible without the aid of the laryngoscope.

PART OF A

Clinical Lecture

ON THE

RADICAL CURE OF VARICOCELE BY THE GALVANIC ÉCRASEUR.

Delivered at the Westminster Hospital on July 3rd, 1880,

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GENTLEMEN,—Although there are very many cases of varicocele in which no treatment, or only palliative measures, are required, you will meet with others in which it will be your duty to undertake the permanent or radical cure of the varix. These cases are as follow:—1. Where the testicle is atrophying. 2. Where the varicocele is double, especially if an examination of the semen shows an absence of spermatozoa, or the patient, being married, is sterile. 3. Where the opposite testicle is lost or useless from tumour, orchitis, epididymitis, or injury. 4. Where the varix is large and increasing, in spite of palliative treatment. 5. Where the varix causes much pain, or interferes with proper exercise and necessary work. 6. Where it is the occasion of marked mental depression. 7. Where the varicocele prevents acceptance for either of the Government services.

There are many plans for securing the radical cure of varicocele, including castration, excision of the veins, the actual cautery, forcipressure, and ligature. The ligature is the method most commonly adopted, and has been variously modified by Ricord, Vidal, Erichsen, Wood, and H. Lee. (These methods of treatment were then described.)

Of the efficacy of these treatments there can be no doubt, but unfortunately they have two drawbacks—the pain attending them, and a certain amount of danger. For a long time surgeons avoided as far as possible any interference with veins, and although veins are now ligatured almost as freely as arteries, there is no doubt that diffuse thrombosis, embolism, and septic poisoning are more liable to follow injuries of veins than of arteries. This being so, it is plainly the surgeon's duty to avoid in every possible way any irritation or disturbance of an injured vein, and it is because this principle is not sufficiently carried out that the usual modes of treating varicocele have been attended with serious and even disastrous results. The daily twist of Vidal's pin, and constant traction of Wood's spring, are not only painful, but opposed to the great principle that demands perfect rest to all inflamed and injured tissues, and veins in particular, while, in Lee's operation, the presence of two harelip-pins transfixing the scrotum is apt to set up œdema and inflammation, and their removal is not without risk of embolism. That these are no imaginary fears is evident from the published results of these and analogous treatments. Gant says that the results of the operations are "variable," and include diffuse inflammation and sloughing of the scrotum, suppuration of the testicle, phlebitis, pyæmia, and death; Erichsen records two deaths from the twisted suture; Gross had one death after ligature; Sir E. Home had one nearly fatal case; Escallier mentions two fatal cases of phlebitis, and Curling speaks of three cases of serious results, two of which were fatal. Some years ago the censor of one of the chief London hospitals died from pyæmia after Lee's operation. This list by no means includes all the accidents of these treatments—it makes no mention of the pain suffered, or of the inflammatory œdema and suppuration of the scrotum.

It was with the hope of avoiding these complications that I was led, now more than two years ago, to try the plan of subcutaneous division of the veins by means of a platinum wire heated to a red heat by electricity. The procedure is, as you have seen, very simple. First, feel for the vas deferens, and grasp the veins in front of it, and nip in the scrotum with the left thumb and forefinger; transfix the scrotum at this spot between the duct and the veins with a narrow bistoury, and pass a needle armed with a platinum wire in the track of the knife; then return the needle through the same apertures, but this time in front of the veins between them and the skin. Of course, if the vas happen to be in front of the veins, as was the case in that of W. C——, shown to-day, you modify the procedure a little. In this way you have the veins in a loop of the wire. It is better to make a puncture with a knife rather than merely to transfix with the needle, for the veins are looped up cleaner, there is not the same liability to include a portion of the skin in the noose as in the latter plan. Then attach the ends of the wire to the écraseur, and connect with the battery, using sufficient cells to cause a faint hissing noise; one cell of Grove's battery, or at most two, is sufficient. This step must be done deliberately; I have taken as long as five or six minutes over it. To protect the skin from burning, let some cold water trickle over it while the wire is burning its way through the veins. The after-treatment consists in perfect rest in bed for a few days, with the scrotum supported on a broad strip of strapping fixed across the front of the thighs. I have three times operated without anæsthesia, but the pain may be severe, and I prefer to have the patient under the influence of ether. After recovery from the anæsthesia there is an entire absence of pain, and this perfect freedom from spontaneous pain continues uninterrupted throughout the convalescence. A few hours after the operation the knobby feel of the varix is replaced by a soft even swelling, which lessens and hardens, and at the end of forty-eight hours is usually to be felt as a hard lump, about the size of a big marble. This is tender on pressure. By the end of a week it has lost its tenderness, and has shrunk to three-quarters its original size. The veins below can still be felt full, but not compressible, the blood in them has by that time coagulated, and they become smaller and firmer, until ultimately a small pea-like induration in front of the vas is all that is left, and even this may disappear, and no trace of the varix or operation be left, as in W. S——.

I have employed this method eight times, each time the varix has been cured, the symptoms complained of relieved, and no mischief to the testicle has followed. These eight cases have shown me that there are three things to be carefully avoided. The first is hurry in the section of the veins; twice a few drops of blood have followed the escape of the wire, but only so little as to require nothing more than lint or cotton-wool to be placed over the wound; in neither instance was there any hæmatocele. The second is to operate well above the tunica vaginalis; in one of my cases acute hydrocele was lighted up, it quickly subsided under belladonna fomentations. The third is burning of the skin, leading to a small slough; although there is nothing of serious moment in this slough, it is of course best to avoid it, and if the skin is incised and kept cold and the loop of wire not brought too small it can generally be saved.

I can recommend you to practise this operation, first, because of its entire painlessness after the few moments of its actual performance, and, secondly, because it fulfils the physiological indications better than any other I know of. My cases at present are too few to prove by statistics that it is less dangerous to life than those operations I have mentioned, but they are sufficient to show that the operation is simple, effectual, and introduces no new danger, while it is obviously free from the sources of irritation common to other methods.

The section of the veins is completed at once; there is no foreign body liable to set up inflammation left in contact with the healing veins, which are allowed to remain at perfect rest, while their seared ends are becoming permanently closed. As you are aware, the closure of an open vessel by the hot wire or iron is usually considered a particularly safe plan. There is also no interference with the skin of the scrotum, as in Lee's operation; no compression of the scrotal vessels, no œdema.

The only other method that I should at all recommend to you is the use of the catgut ligature applied to the veins subcutaneously. I have had no experience in it, but it has been done with success. I think the heated wire is preferable, because the catgut ligature is rather uncertain in its action; it may soften very rapidly and then fail to occlude the vessels, or it may not soften at all and cut its way through the veins like an ordinary hempen or silk thread, or remain and subsequently light up inflammation. These accidents are only occasional, but we should none the less be on our guard against them, and give the preference to a plan of treatment which is free from them. In none of my eight cases has any slough separated from the veins; the eschar formed has been absorbed by the living tissues. I show you to-day four cases at varying periods after the operation illustrating their progress.

1. W. J——, aged seventeen, a large left varicocele, which he had noticed for "several years," left testicle smaller than right, complained of dragging pains in scrotum and up to left loin. Operation June 21st, 1879; left hospital June 28th. A firm induration the size of a marble felt; not tender; veins below plugged.

2. F. L——, aged twenty-four, single, injured left testicle five years ago; first noticed varicocele three years ago, after an attack of clap, since then the pain and swelling had steadily increased in spite of wearing a suspender. No constipation; external piles for two years. Operation May 28th; left hospital June 8th. The induration is very hard, the size of a horse bean; veins below are firm and shrinking.

3. W. C——, aged thirty, single, very large left varicocele, noticed suddenly in June, 1879, while bathing. Pain in scrotum and groin had increased of late; testicle smaller than right. Operation May 1st; left hospital May 7th; delayed on account of a slough of skin. Induration now small; veins below cannot be felt; testicle has regained its former size and is a little larger than right.

4. W. S——, twenty-one, a small varicocele noticed some years; scrotum not lax; considerable pain; frequent seminal emissions and mental depression. Operation Sept. 29th; left hospital Oct. 9th. No trace of dilated veins or of the seat of the operation to be felt. All symptoms relieved.

SOME STATISTICS OF FATAL CHOREA.

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THE pathology of chorea needs to be discussed upon a wider basis than that which is offered by morbid anatomy. Nevertheless, no survey of the disorder can be complete which fails to take into account evidence of this sort. The review of a sufficient number of examples of fatal chorea, apart from any direct discovery of morbid change, cannot fail to be of service in exhibiting the age and sex and temperament most liable to succumb to such attacks. We are thus assisted in separating from one another a highly dangerous form of convulsion, and that far commoner motor disorder which, whether violent or not, has little or nothing of danger about it, and probably recovers best without active medical interference.

Yet, with this obvious service to be got from the study of fatal chorea, the event of death is so rare that no single observer from his own experience can do more than contribute a very small share of the material necessary for the purpose of drawing any general conclusions. Thus, Dr. Hughes, in so large a hospital as Guy's, was able to collect from all the records by various hands which had been preserved during more than thirty years, only eleven fatal cases. Dr. Dickinson, from a similar record at St. George's, extending over thirty-three years, collected sixteen such cases, while the large field of observation offered by the Hospital for Sick Children during fifteen years furnishes but six. These examples, it must be understood, include those dying *with* chorea as well as those dying of it. Although it is not always easy to distinguish between these two classes, it is certain, as will presently appear, that the cases of death attributable directly to chorea fall very far short of the numbers just given. It must be added that many of the earlier records are very defective, that there is no uniform plan of tabulation, and that with different observers different points of interest have received mention.

On the whole it may be said that if all the recorded accounts of fatal chorea in this country which are fairly complete and readily accessible were put together the total number would not be large, and that in a considerable proportion of these the immediate cause of death and the choreic disorder would be found in very remote and uncertain connexion.

Such being the facts of the case, I have thought it of interest to bring together eighty cases of death in connexion with chorea, or at least with convulsions resembling and called chorea. They are made up as follows:—(*a*) Three cases (quoted by Dr. Bright), Med. Clin. Trans., 1839; (*b*) eleven cases (Dr. Hughes), Guy's Hospital Reports, 1846 (first series); (*c*) seven cases (from same source), 1855 (second series); (*d*) thirty-four cases (Dr. Tuckwell), Bartholomew's Hospital Reports, vol. v.; (*e*) twenty-two cases (Dr. Dickinson), Med. Clin. Trans., vol. lix.; (*f*) three cases (Dr. Peacock), St. Thomas's Hospital Reports, vol. viii.

With these references and the frequent mention I shall have to make of each of these eminent authors no one can quote against me on their behalf the line that Virgil wrote on the palace gate. The present object is to bring together under one point of view a body of evidence derived from many sources without admixture of extraneous matter. Of the conclusions to be drawn from such evidence the reader will judge for himself.

The points I propose to examine concern the age and sex and common exciting cause of fatal chorea, together with its most obvious morbid associations. It will be seen immediately that only a proportion of the eighty cases are given in such detail as to be dealt with in all these respects. Thus Dr. Tuckwell's account is no more than a short summary occupying one paragraph of his paper just quoted. Dr. Hughes's first series is described by himself as "very meagre and imperfect;" Dr. Bright's three cases, although so often quoted, are not altogether in point; in one there was trismus and tetanic spasm, and in a second paroxysmal attacks described as hysteric. In the several enumerations now to be made, therefore, while eighty will be the extreme number dealt with, smaller numbers will have to serve in regard to particular points where the information is defective. With such deduction the cases available in all respects will not exceed thirty, but thirty in the circumstances of this disorder is a large number, it is the gleaning of a very wide field, the sum of fatality out of many thousand examples of chorea extending over a long period of years.

Taking in the first instance the gross number eighty as representing so many individuals dying in connexion with chorea, the most striking point of all to those who are in the habit of regarding chorea as a child's affection is the large proportion of adults and the small proportion of children. Of the eighty, forty-eight are over thirteen years of age, and the ages of two are not stated. Excluding Dr. Tuckwell's numbers, where further particulars are not given, we have in forty-six fatal cases twenty-seven who are over thirteen and nineteen who are under that age. Of the twenty-seven over thirteen, as many as twenty-three may be said to have died *of* chorea. Of the nineteen children, ten at the utmost died *of* it, the youngest of these being a girl of seven (No. 19 in Dr. Dickinson's table, loc. cit.). Or, again, excluding Dr. Hughes's first (and defective) series, we should have, out of a total of thirty-five, twenty fatal cases over the age of thirteen, of whom sixteen died apparently *of* chorea; and fifteen under thirteen, of whom only seven died apparently *of* chorea. We thus establish the fact, making large allowance for error (which from the nature of the material cannot be wholly excluded), that the mortality of children directly from chorea is exceedingly small, and that seven is the youngest age at which it is known as a fatal disease in a very extensive review. We find also, as we should expect in view of the comparative commonness of chorea in children, that the proportion dying *with* chorea but not *of* it is greater with them than with adults.

But next in regard to *sex*. In forty-six fatal cases (again excluding Dr. Tuckwell's) thirty-four are females and twelve males. Of the thirty-four females eight only were children, the youngest (mentioned above) seven years old, and one described only as "a child." As many as twenty-six were young women, eleven of whom, there is good evidence to show, died *of* chorea. Of the twelve males nine were adults and only three young boys. These latter are made up as follows: One is in Dr. Hughes's first series (No. 6), one is in Dr. Dickinson's table (No. 14), and died of heart affection "without return of chorea," and one is a case of the late Dr. Fuller's (No. 9 in the same table) that died under my own observation as then Medical Registrar at St. George's Hospital, after five months of almost persistent convulsion. These three boys were each eleven years old. It does not appear upon the evidence before us that chorea is ever fatal to males at an earlier age than this, nor have we more than one out of the three whose death is immediately attributable to this disorder.

The puberty age, then, is the age of fatal chorea. If we take forty-six as representing the total number of persons dying in this connexion, thirty-five would be at or a little above the age of puberty, and twenty-five of these young women.[1] We are thus led to associate fatal chorea with the disturbing incidents of a critical period of life. And the more so inasmuch as in those instances where exciting causes are actually discovered and recorded (but a small proportion, it must be remembered, of the whole number), there is frequent mention of some special excitement of those parts and organs which in the plan of nature are properly over-active at this particular time. Thus Dr. Hughes, in his second series of cases, finds the genital organs unusually excited in three of the four cases examined, while in Dr. Dickinson's table out of nine dying directly of chorea, and with causes assigned, there are three in whom these causes are distinctly sexual.

And not only does fatal chorea attach peculiarly to the emotional sex and the emotional time of life, there are but few instances of it out of the few fully detailed cases which constitute our entire material in this matter where mental excitement does not concur with the bodily over-movement. Such mental disturbance embraces all varieties, from the hysterical to the maniacal. Here again, therefore, a distinction appears between the fatal chorea of adolescence and the non-fatal chorea of childhood. The latter, even in its greatest violence, is commonly quite apart from emotion. The disorder acquires this mental admixture at the same time that it reaches what may be called its dangerous age. It will be perhaps better in this place to cite instances rather than to quote figures. The condition to which I am alluding is manifested by particular incidents. Thus in a case related by Dr. Hughes (first series, loc. cit., p. 390) a man of twenty-five, with violent and ultimately fatal chorea, was "sensibly hurt and shed tears when the bystanders observed that he could restrain the movements if he pleased." In a second case, by the same author (second series, p. 250), that of a girl of eighteen, the symptoms "which were at first slight were suddenly aggravated by fright caused by a patient in the same ward, and she became almost maniacal." In a third instance (from the same series, p. 251), a girl of sixteen, where "there was unusual excitement of the generative organs," the symptoms at first "partook of the character of hysteria, the patient appeared strange in her movements, and fancied that others were laughing at her." In a fourth, a boy of sixteen, "supposed to be addicted to secret vice, his early movements excited the derision of his comrades. Their conduct depressed him much, and he went suddenly into a fit, after which violent and universal chorea supervened." In all three of Dr. Peacock's fatal cases mental excitement is a prominent feature. In one of the very few cases that are recorded of chorea fatal as early as ten (Dr. Dickinson, loc. cit., p. 2), it is related of the child (and some will probably regard the relation as trivial) that a little friend of hers had lately died of chorea, she had watched and imitated the movements, and when she recognised them in her own person made sure that she should meet the same fate. If it be remembered from how small a number of examples these instances are taken, even these few quotations will be allowed to have weight in showing the common habit of fatal chorea. I think it may be said, indeed, not only of fatal chorea but of chorea that at any part of its course threatens to be fatal (a comparatively large number) that amongst the symptoms that give alarm nervous exaltation (so to speak) is generally one.

But while the emotional origin of chorea is thus apparent, as well as the direct influence of mental causes in determining its fatal issue, it is not to be doubted that fatal chorea arises in some instances in immediate connexion with acute rheumatism. The evidence upon this point now before us is to the following effect:—Out of thirty-two fatal cases dying *with* chorea, and reported with sufficient fulness to be available (viz., seven of Dr. Hughes', second series, twenty-two of Dr. Dickinson's, and three reported by Dr.

[1] There is but one elderly person on the list, a woman aged fifty-four, who had had chorea for four years. (Dr. Dickinson, loc. cit., No. 15.)

Peacock), seven had a rheumatic origin. Selecting out of the thirty-two eighteen who died directly *of* chorea (viz., five of Dr. Hughes', ten of Dr. Dickinson's, and all three of Dr. Peacock's), we get three—a male and two females, *all adults*—where the fatal disorder was of rheumatic origin. These numbers corroborate what I have before maintained in this journal—viz., that acute rheumatism, although having but a small share in chorea, is nevertheless veritably associated with it, and especially with its fatal form at the puberty age.

Coming now to the morbid associations of chorea in so far as they are revealed post-mortem, the evidence before us fully bears out the belief expressed by the late Dr. Kirkes in 1863, "that further experience would still more positively demonstrate that an affection of the left valves of the heart with the presence of granular vegetations upon them is an almost invariable attendant upon chorea, under whatever circumstances the chorea may be developed." The singular accuracy of this description, the need of "almost," and the justice of applying the observation to chorea of whatever origin, and not limiting it (as some would do even now) to rheumatic chorea, or even to chorea fatal as such, will be seen in what is now to be said. Out of all the cases in which the condition in question is especially mentioned I can find but five where the heart valves and pericardium are reported healthy, one of these being an elderly woman. Wherever the heart is affected the mitral valve is affected; the aortic valves are implicated often, the pericardium sometimes. This heart affection occurs equally in those that die in connexion with chorea, and in those that die directly of it. Thus, of Dr. Dickinson's twenty-two there are, as I reckon, twelve dying *with*, but not *of*, chorea; of these ten have mitral valve vegetations, and two have not. Of the ten dying *of* chorea seven have vegetations, and three have not. In Dr. Peacock's three cases, all dying *of* chorea, two have vegetations, and one has not. The valve deposit, which for shortness I thus name, may be either old or new, and variously connected with the mitral valves on their auricular side. The condition would seem to be an accident of the disease it accompanies, having but little apparent connexion with its fatal result. It so happens that of the five cases just mentioned as being the only examples of chorea occurring with perfectly healthy heart, all save one, the old woman, are typical instances of deaths in and by chorea. Three were girls at about the puberty age (Nos. 1, 5, and 8 in Dr. Dickinson's table), and one is a girl of Dr. Peacock's, aged twelve (St. Thomas's Reports, vol. viii., p. 29).

With the exception of this observation in regard to the heart and pericardium, there is little to be gathered in the material now before us as to the morbid anatomy of fatal chorea. I need not now refer to Dr. Dickinson's investigations as to the minute nervous changes in seven of the cases here mentioned, nor to those of Dr. Tuckwell upon embolic plugging, in the paper above quoted. Speaking generally, it must be said that the state of the brain and cord is not described in sufficient detail to be instructive. In a large proportion the brain, in a few the cord, is described as "congested." In the case of the boy to whom I have alluded as the single example of the kind in my own experience or in these tables, it was observed that "the grey matter of the cord was altered and yellow in patches," but there was no minute examination.

How far the foregoing particulars may serve to fortify or disturb pathological doctrines I do not now inquire. Their practical teaching is obvious. We are justified upon this evidence in looking upon severe chorea at the puberty age, especially in connexion with sexual excitement or with acute rheumatism, as a dangerous disorder apt to terminate fatally. It is true that we do not number many fatal cases, but it is also true that we do not meet with many, whether fatal or otherwise. The condition of such patients is the more precarious when, as is commonly the case, there is emotional as well as motor disorder. Such nervous exaltation, which is commonly altogether absent in the more familiar chorea of childhood, is with these both the sign and the source of danger. They are in a state of extreme sensitiveness, and lay hold of trivial circumstances to aggravate their disquiet. The smallest incident, the conduct of bystanders, undeserved reproach or ridicule, or even the sight of a patient affected like themselves, will often have its immediate prejudicial influence in a degree which those who have little experience of this kind of convulsion (whose actual title to the name of chorea, as Dr. Bright's cases show, is often far from obvious) will find it difficult to believe. The question arises whether in these circumstances we address our treatment sufficiently to this mental state.

But the facts before us have this further teaching. If we exclude puberty, chorea of whatever violence is hardly dangerous to life. If we exclude both puberty and the female sex, chorea of whatever violence is not dangerous at all. Now violent chorea is by no means uncommon with boys. Thousands of examples of it must be comprehended within the period we are now reviewing. And yet in all that time, and from so many fields of observations, we get but one boy, aged eleven, dying of chronic chorea after five months, and probably with sclerosis of the cord. Chorea therefore, we may say, extremely rarely fatal in little girls, is, practically speaking, never fatal in little boys. If we add to this, what will not be denied, that permanent disablement from chorea is very uncommon, and that there is no treatment that even pretends to avert such after-effects, we get a strong argument in favour of leaving childish chorea alone. This conclusion will be further strengthened by a perusal of the valuable papers published in THE LANCET of Nov. 18th, 1876, by Drs. Tuckwell and Gray, upon "The Expectant Treatment of Chorea."

The conclusions to be derived from the foregoing review may be expressed as follows:—

1. Chorea, regarded as a disease of itself fatal, belongs almost exclusively to puberty, and especially to female puberty; its immediate exciting cause having distinct reference, in many instances, to conditions of unusual sexual excitement.

2. Besides the operation of sexual causes mental disturbance has to be reckoned; not fright only, but worry, anxiety, and despondency also, while the force and influence of such impressions is to be seen in the course as well as in the origin of fatal chorea.

3. Acute rheumatism appears as a cause of fatal chorea in but a small proportion of cases; yet the association, infrequent as it is, is distinct and unquestionable.

4. Chorea in its fatal, no less than in its non-fatal forms, shows strong preference for the female sex at all ages. Children, however, very rarely die of it, and boys, practically speaking, never.

5. Mental excitement, in varying degree (although not amongst the symptoms of ordinary chorea), is met with in so large a proportion of its fatal examples that we are justified in regarding this concurrence as of bad augury.

6. "Vegetations," new or old, on the auricular surface of the mitral valves, with or without similar deposit on the aortic valves, and sometimes with pericarditis, are met with in the great majority of cases dying of, or with, or shortly after, chorea. This condition, however, does not, as a rule, contribute directly to the fatal issue; it is found equally amongst those that die *with* and those that die *of* chorea. In some of the most marked and typical cases of fatal chorea the valves of the heart have been found absolutely healthy.

7. There is no other morbid condition, except that which concerns the heart, occurring with sufficient frequency or uniformity to be regarded as characteristic of fatal chorea.

Wimpole-street.

OBSERVATIONS IN URINARY PATHOLOGY AND THERAPEUTICS.

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II. A FORM OF DYSPEPSIA USUALLY ASSOCIATED WITH AN ALKALINE CONDITION OF THE URINE.

WHEN human urine becomes alkaline it is due to one or other of the following conditions: 1. To excess of the alkaline carbonates of potash and soda; a condition that frequently occurs normally after the ingestion in large quantities of vegetables and fruits. 2. Excessive elimination of the phosphates of the alkaline and earthy bases under conditions that have not been yet thoroughly studied, but which are not unfrequently found preceding or even accompanying saccharine diabetes; or sometimes, as has recently

been suggested,[1] forming a distinct disease. 3. By the formation of ammonia in the urine from decomposition of urea. Now the reaction of healthy human urine collected throughout the twenty-four hours is acid, but if separate samples of the urine passed during this period be taken, considerable variations in the character of the reaction will be observed. The constancy with which these variations occur under different diurnal physiological conditions was first studied by Dr. Bence Jones. That physician pointed out that the acid reaction of the urine increases and diminishes inversely with the secretion of the gastric juice. He found by examining the urine at short intervals during the day that an increase of acidity was observed in the urines passed before meals, and that a decline in the acidity occurred shortly after food had been taken, and acid was consequently withdrawn from the system; its maximum decline being attained in about three hours, when the acidity begins to rise. In some instances not merely was there depression of the acidity, but the urine became neutral and even alkaline. These observations of Dr. Bence Jones have been repeatedly confirmed by subsequent investigators; and the ebb and flow in the intensity of acid reaction of the urine, to which the term *alkaline tide* has been aptly applied, is a recognised physiological fact, though explanations different from that offered by Dr. Bence Jones have been advanced to account for the phenomenon. Dr. Roberts,[2] for instance, is disposed to attribute the occurrence of the alkaline tide after meals to a different cause—namely, to the entrance of the newly digested food into the blood. For if, as he says, the normal alkalescence of the blood is due to the preponderance of alkaline bases in all our ordinary articles of food, a meal is *pro tanto* a dose of alkali, which must, for a time, add to the alkalescence of the system, and consequently of the urine. Dr. Bence Jones's view receives considerable support from clinical and physiological experience. Since in those cases attended with frequent vomiting of intensely acid fluid it has often been noticed that the urine passed immediately after the ejection of the fluid becomes alkaline; the same effect is produced in dogs experimentally when pounded glass or other indigestible substance is introduced into the stomach to provoke the secretion of the gastric juice, which is withdrawn as soon as secreted by washing out the stomach with water by means of a stomach-pump, showing in both instances that the alkalinity of the urine was caused by the withdrawal of acid from the stomach, and not by the addition of alkali to the blood. That the ingestion of food, especially vegetable food, contributes, in a slight degree, in the production of the alkaline tide is very probable, but that it is mainly concerned in the phenomenon is out of the question, otherwise the alkalinity of the urine would be in direct proportion to the quantity of food ingested, which is certainly not the case. Indeed, the acidity of the urine can be depressed, and even rendered highly alkaline, otherwise than by the withdrawal of acid from the stomach, or by the ingestion of food. And it is this circumstance, hitherto unexplained, that has rendered many physiologists unwilling to accept Dr. Bence Jones's as a complete solution of the phenomenon. Dr. Hermann Weber,[3] some years ago, observed that whilst breakfast decidedly had an influence in lowering the acidity, yet when he went without that meal the acidity was still lessened, though not to so great a degree. This observation of Dr. Weber I have repeatedly been able to confirm, the mere act of rising always producing a decided depression in the acidity of the urine. The use of the cold douche, or sweating in the vapour bath, both have the same effect, quite independently of food or the activity of the stomach.

There is another channel, however, by which acid is withdrawn from the blood besides the gastric secretion, and that is by the lungs. In the explanations hitherto advanced to account for the phenomenon of the alkaline tide in the urine this fact has not received attention. Dr. Edward Smith, in his researches "On the Elimination of Carbonic Acid" showed conclusively that the exhalation of carbonic acid by the lungs is increased by food and diminished by fasting, and that the amount exhaled during sleep is considerably less than is set free in the waking state. It therefore happens that the time when most carbonic acid is being exhaled corresponds with the time when observers have noticed a decided diminution in the acidity of the urine, whilst the circumstances that diminish the exhalation of carbonic acid—namely, sleep and fasting, are attended by a rise in the acidity of the urinary secretion.

In health, therefore, it is probable that the exhalation of carbonic acid, in conjunction with the withdrawal from the blood of acid for the gastric secretion, and the direct ingestion of alkaline bases, aid in producing the alkaline tide in the urine. In disease, however, circumstances may modify or reverse the action of one or other of the conditions, so that although the variations of the acidity of the urine are frequent and often intensely marked, no connexion either between increased secretion of the gastric juice, the ingestion of food, or the exhalation of carbonic acid by the lungs can often be made out. Thus, for instance, in many pulmonary affections, in convalescence from many acute diseases, such as typhus, enteric fever, scarlet fever, pneumonia, &c., and in certain forms of dyspepsia, the urine remains persistently alkaline for many days together. The reason of this is not difficult of explanation, for in these diseases there is diminished supply of food and metamorphosis of tissue going on in the body, so that the salts which are concerned in maintaining the acidity of the urine are not separated to the same extent as in health. On the other hand, although from the feebleness with which the respiratory act is performed one would suppose that from less carbonic acid being exhaled by the lungs, the urine would maintain its acidity; yet it is not improbable that there being but rarely a temporary increase in its exhalation, in these cases, from the usual physiological stimulus of food and activity, the kidneys aid the lungs in getting rid of carbonic acid by separating it in its stable form (i.e., in combination with alkaline bases in the form of carbonates of potash or soda). Whatever may be said against the hypothesis, it is a fact that these urines nearly invariably effervesce on the addition of dilute acid, thus indicating the presence of carbonates in the urine. Urine alkaline from the presence of fixed alkali has been generally attributed by writers on urinary pathology chiefly to excessive elimination of the alkaline phosphates, and slightly to those of the earthy; and no author, with the exception of Prout, has mentioned that the urine may be pathologically alkaline from the presence of the carbonates of potash and soda. Prout observes[4]:—"There are several distinct forms of disease connected with derangements of the soluble alkalies in the urine independently of the phosphates." And he further observes in these cases, that "the earthy phosphates are rarely entirely absent, but their quantity seems to be below the standard quantity of health, while the quantity of soda, potash, and ammonia appears to be in excess, or, strictly speaking, the *carbonates* of these alkalies appear to be in excess, hence such urine generally effervesces strongly on the addition of an acid." Prout, however, did not distinguish in his observations between the alkalescence caused by the carbonates of soda and potash and that produced by volatile alkali, carbonate of ammonia. Of twelve cases which have come under my observation, in no instance was the alkalescence due to carbonate of ammonia. In four cases the carbonates of potash and soda were associated with considerable excess of the earthy phosphates—cases resembling in many respects those described by Dr. Tessier of Lyons as not unfrequently preceding or accompanying saccharine diabetes, or sometimes running a distinct course, and to which I hope to refer on some future occasion. Of the remaining eight cases the alkalescence of the urine was due entirely to the presence of the alkaline carbonates, the alkaline and earthy phosphates being either normal or diminished in quantity, and no trace of either carbonate or free ammonia being discoverable.

(To be continued.)

[1] Du Diabète Phosphatique. Par Dr. J. L. Tessier, de Lyons. Baillière et fils. Paris, 1877. Also two cases by Author. Path. Soc. Trans., vol. xxix. 1878.

[2] A Contribution to Urology. Memoirs of the Manchester Lit. and Phil. Soc. 1859.

[3] Professor Parkes, on the Composition of the Urine in Health and Disease, pp. 55. Churchill. 1860.

[4] Nature and Treatment of Stomach and Renal Diseases. By William Prout, M.D. Fifth Edition, p. 260. London: Churchill. 1858.

DEATH FROM HYDROPHOBIA.—An inquest was held last week at the Mater Misericordiæ Hospital, Dublin, on the body of a man named Reid, who died on the 5th inst. in the Hospital from hydrophobia. Deceased was bitten on the nose in March last by a strange dog, but the matter was forgotten until a few days before his death, when the usual symptoms of the disease presented themselves.

BRIEF NOTES OF A VOYAGE TO BRAZIL.

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(Concluded from p. 4.)

FROM the shortness of my stay in Rio, and from the extreme heat of the weather, I was not able to see so much of the public institutions as I could have wished to do. I visited, however, the general hospital, "the Santa Casa da Misericordia," and the Leper Hospital, Imperial Hospital dos Lazaros. The former institution embraces the character of an infirmary as well as of a hospital proper. The first of its rules states that it is "instituted for the reception of all sick poor in the city of Rio, without distinction as to nation, condition, or religion." The hospital is situated close to the bay at the Praia de Santa Luzia. It was originally a Jesuit convent, but the old buildings have been entirely removed and replaced by the present hospital. The erection was commenced in 1840 and completed at the end of June, 1877. It consists of buildings arranged in a quadrangular form, the included space being crossed from end to end and from side to side by other buildings, so as to leave intervening spaces laid out as gardens, and which are rich in the profusion of tropical vegetation. In the centre of the front, on the ground floor, there is a large hall, from which the administrative offices open on each side, while at the back there are corridors leading to the lower wards, and a staircase which communicates with a fine room occupying the whole centre of the building on the first floor, and called from the statue which it contains the Emperor's room. On the same floor there are other apartments, employed for the meetings of the managers, and ornamented with full-sized portraits of various benefactors of the charity.

The wards for the reception of the patients occupy the outside of the building, and the wings which cross from end to end of the central space. The wards are long and lofty, and have large windows on the outside, and folding doors opening into wide corridors on the other side. They contain from thirty to forty beds each, two beds being placed in the piers between each pair of windows or of folding doors. The corridors have windows on the side opposite to the folding doors, and corresponding with them, so that the greatest facility is afforded for the perflation of air through all parts. The superficial space is less than would be here thought necessary, but the cubic space is large from the great height of the wards. In the climate of Rio, where doors and windows can be constantly kept open, the space is probably very ample. The sides of the wards for from four to six feet from the floor are lined by blue and white tiles—"azuleos," and the floors are formed of dark-coloured ornamental woods, inlaid and polished. The building is two stories high, and the medical cases are placed on the ground floor, the surgical on the first floor.

From the reports published by the administrators, it appears that since October, 1871, the *personnel* of the hospital has consisted of a medical director, a vice-director, four resident physicians and three house-surgeons, of whom one is an ophthalmic surgeon, together with twelve visiting physicians and three surgeons, who are members of the Medical Faculty of the University. There are also special medical officers for the private rooms, and for the children and aged persons, with resident clinical clerks and dressers, who are students of the Medical Faculty. The wards are under the charge of French Sisters of Charity, of the order of St. Vincent de Paul; but the cleaning is done by hired servants, and there are two male attendants in each male ward. I found an English lady among the sisters, and understood that she had been several years in the order. I spoke to many of the English and American patients whom I found in the wards, and received the most satisfactory testimony to the kindness and attention which they received from everyone connected with the establishment. I was also assured that their religious views were in no degree interfered with.

Under the same management with the Misericordia Hospital there is a Foundling Hospital, an orphanage and a lunatic asylum, the Hospicio de Pedro II. There is also the Hospicio de Nossa Senhora da Sauda, which is apparently used as a casualty hospital to receive special cases in times when epidemics are prevailing. In 1875 and 1876 it received a large number of cases of yellow fever and small-pox. When also yellow fever is unusually prevalent local infirmaries are provided under the administration of the Misericordia Hospital, at the expense of the Imperial Government, in different parts of the city of Rio.

The Misericordia Hospital is maintained partly by funds which have descended to it from the convent to which it has succeeded, partly by donations and bequests, and partly by a monopoly which it possesses of the right to conduct the funerals of all persons dying in Rio, and also by lotteries. There are also private rooms in the hospital into which persons are admitted on payment. Every part of the hospital was scrupulously neat and clean, and altogether it may be pronounced to be admirably constructed and most excellently managed; and it is an institution of which any country might well be proud. Elaborate reports are published by the Brazilian Government of all matters connected with the financial condition and medical management of the hospital, and they are very liberally distributed to visitors. It appears that in 1877 and 1878 the number of patients in the hospital at the commencement of the official year, in July, was 1048. There were admitted during the year 14,043, making a total of 15,091; of this number 2232 died, giving a rate of mortality of 14 per cent. In the official year 1878–79 the number of patients treated was 13,870; and of these there were cured 9556, relieved 1892, not relieved 190, and died 2322—showing a rate of mortality of 16 per cent.

The report of the Misericordia Hospital for 1873–7 is accompanied by reports of the Hospices and Infirmaries for the treatment of the cases of yellow fever. The infirmaries were five in number, and during the period of about four months in which in 1876 yellow fever prevailed they received a total of 1634 patients, of whom 620 died, giving a mortality of 38 per cent.; but it is stated that many of the patients were moribund at the time of their admission. The mortality varied considerably in the different hospitals, ranging from 32 per cent. in Santa Anna and Santa Rita to 48 per cent. in the Visitação. The cases in the Hospicio de Nossa Senhora da Sauda had a mortality of 43 per cent. The reports—especially that of Santa Rita—contain some interesting details as to the mortality of the epidemic under different circumstances, such as the ages of the patients, the periods during which they had resided in Brazil, and the duration of the attack at the time at which they came under treatment. Between the ages of seven and fifteen the rate of mortality was 34·1 per cent.; between sixteen and twenty-five it was 21·6; between twenty-six and forty 45·2 per cent.; between 41 and sixty 47 per cent. In persons who had been resident in Rio for periods of one year or less the rate was 42·9 per cent. In those who had been in the city for various periods exceeding one year the rate was only 16·1 per cent. In persons admitted into the hospital after being ill for only one day or a shorter time the rate of mortality was 27·7 per cent. In those who had been ill from two to four days it was 37·3 per cent.; and in those ill for periods exceeding four days it was 42·1 per cent.

The Hospicio de Nossa Senhora da Sauda received also during the year 1875-76 329 cases of small-pox, and of these 133 proved fatal, or 40 per cent., while forty-five cases of varioloid all recovered.

I also visited the Leper Hospital—the Imperial Hospital dos Lazaros. This is also partly an old building, a suppressed convent, and partly of recent erection. It is situated in the district of San Christavos, on a slightly elevated knoll, close to the bay, of which the terrace in front of the hospital commands a beautiful view. It consists of a narrow centre, from which a long wing projects at each end. The wards are placed on the outside of the building, and a corridor runs on the inner side. In the old part of the building the wards only contain two beds; in the new part they are intended for a larger number—one ward contained ten or twelve beds, and afforded ample space. The new part of the building was in part built with funds obtained from the sale of decorations and titles. The hospital is supported by endowments, legacies, and donations. It is adapted for the reception of 100 patients, but at the time of my visit contained only forty. I examined the cases which I found in the hospital, but from having to conduct my inquiries through a gentleman who kindly accompanied me I was not able to make a satisfactory investigation. The cases were

described in the hospital case-book, which was shown to me, as cases of morphœa, or elephantiasis of the Greeks, or the tubercular form of leprosy, and the subjects of the disease were white persons of Brazilian or Portuguese extraction, native negroes, and mulattos. There was also a case of the anæsthetic form in a native negro. The subjects of the disease were chiefly males, and the ages varied. Patients of whose cases I took notes were sixteen, eighteen, thirty, thirty-five, and thirty-six years of age. Taken as a whole, the cases were less marked and advanced than those which I saw at the Lisbon Leper Hospital in 1870.[1]

I endeavoured to ascertain the generally-received opinion as to the probable causation of the disease, and was informed that it was generally ascribed to eating pork too exclusively, and in reference to the influence of a fish diet I was assured that the disease is very common in districts of Brazil where fish is not eaten—where, indeed, it is scarcely procurable.

In the return voyage we followed very much the same course as that adopted in the voyage out. We called in at Bahia and Pernambuco, sailed immediately on the west side of Fernando Noronha, so as to have a good view of that curious island, which, in the outward voyage, we had passed at night. We crossed the Line in 31° 15′ W. long., coaled at St. Vincent, and then sailed to the westward of the Canary Islands, instead of through the group, as we had done in going out, passing close in on the west side of Ferro and Palma, and having distant views of Gomera and Teneriffe, the peak of the latter rising abruptly as a cone out of the sea, and being very distinctly seen at the distance of 90 to 100 miles.

In the outward voyage we left Southampton in the afternoon of the 9th of February, arrived at Lisbon on the 14th, crossed the Line in longitude 31° 43′ W. on the 24th, arrived at Pernambuco on the 26th and at Bahia on the 28th, and anchored in the harbour of Rio on the 1st of March. On the return voyage we left Rio on the 10th of March, called in at Bahia and Pernambuco on the 13th and 15th, crossed the Line on the 17th in longitude 31° 15′ W., arrived at St. Vincent on the 22nd, at Lisbon on the 28th, and moored to the extension pier at Southampton on the afternoon of the 31st, thus occupying in the whole voyage fifty-one days.

In going out we felt it warm at the Canary Islands, hot at St. Vincent, and very hot from thence to Rio. In returning it was cool at St. Vincent, and decidedly cold at the Canary Islands, and thence to Southampton.

I performed the voyage in the *Tagus*, one of the finest vessels of the fleet of the Royal Mail Steam Packet Company, and I should do injustice to my own feelings if I did not express my satisfaction with the arrangements of every kind on board the vessel, and my acknowledgment of the kind attention which I received from Captain Arthur Gillies and all his officers.

In summing up the results of my voyage I may say that though many years ago I had been in southern latitudes, and have seen some very beautiful tropical scenery, I have never seen anything to equal the luxuriance of the Brazilian vegetation. I was repeatedly told that the period of my visit was the time of fruit, not of flowers, but to me the country seemed everywhere covered with flowers. Around Rio the hedges were yellow with the blossom of the alamanda. At Tijuca the forest was purple with the flowers of the quaresma, or flower of Lent, a species of melastoma, and a large tree with bunches of bright yellow flowers, called by the natives cozeneira, was also very abundant on the mountain side. The bread-fruit trees and the mangos are also very beautiful, and it is almost worth a voyage to Rio to see the avenues of royal or imperial palms, the Oreodoxa oleracea, in the Botanic Gardens.

One of the most interesting features of a sea voyage, and especially of a voyage in southern latitudes, is the opportunity which it affords for the observation of the heavenly bodies. The sky being generally clear, and the stars shining with a brilliancy of which in this climate we have very little conception. In this respect, however, my late voyage was, in some degree, disappointing. I was anxious to observe the disappearance of the Pole star beneath the northern horizon, and the first appearance of the cross in the southern hemisphere; but while in the northern tropic, however clear the sky might be during the day, it uniformly became obscured towards the evening, and at night was generally covered with clouds, so that after reaching the Cape Verde Islands till we were south of the Line and well into the south-east trade wind, towards the coast of Brazil, there was scarcely a clear evening. This might possibly be owing to the very slight north-easterly trade wind which we encountered, causing the equatorial cloud belt to be extended to the north beyond its ordinary limits.

Voyagers to the south for the first time are generally very anxious to see the constellation of the Southern Cross, and usually find it to fall very much below what their imagination had pictured it. This feeling is well expressed by Madame Agassiz in her account of her husband's expedition to Brazil[2]: "We saw the Southern Cross for the first time. With the visible image I lost a far more wonderful constellation, which had lived in my imagination; it has vanished with its golden glory. . . . . In its place stands the veritable constellation with its four little points of light." I had myself frequently seen the constellation before, and had a tolerably clear recollection of its peculiarities, yet I felt very anxious to see it again, and partook very decidedly of the disappointment which, when seen, it generally leaves. As a constellation it is certainly very inferior to some of the groups of stars in the northern hemisphere, and especially it does not compare favourably with Orion, which being an equinoctial constellation, was visible during the whole voyage, and shone in the tropics with a brilliancy which I do not recollect to have ever seen equalled. Though, however, the Southern Cross is not imposing as a separate constellation, the portion of the heavens which it occupies is very beautiful, being very thickly studded with stars which though small, are very distinct and brilliant, much more so than those which constitute the milky way. The Megallanic clouds are very curious, as is also the patch of sky near the Cross, to which, from its apparent blackness, sailors have given the name of the "Coal-sack." This darkness is due to the entire absence of stars visible to the naked eye in a space surrounded by sky thickly studded with them.

Altogether the voyage was very pleasurable, and the time which I spent at Rio passed very agreeably, and was only too short, thanks to the kindness of friends with whom I passed it; and I returned home refreshed and invigorated, both in mind and body.

[1] See THE LANCET, 1870.

OBSERVATIONS ON THE BLOOD IN ANÆMIA.

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FOR the past few years, and especially since Dr. Gowers introduced to the notice of the profession his modification of Hayem's hæmacytometer,[3] numerous observers in this country have been studying the condition of the blood, under varying circumstances both in health and disease. In a previous number of THE LANCET (May 10th, 1879) I published the results obtained from repeated examinations of the blood in ten cases of anæmia, occurring in unmarried girls. Several hundred observations which I have made since the publication of that paper have served to confirm the results and conclusions there set forth, while their value has been enhanced and their interest increased through the fact that the use of Dr. Gowers' hæmoglobinometer has, in many of the cases, enabled the amount of hæmoglobin to be estimated as well as the corpuscular richness of the blood.

As this instrument is probably unknown to many, a brief description of it may not be unadvisable.[4] The colour of the blood, diluted with distilled water, is taken as an index of the amount of hæmoglobin. The standard consists of a dilution of a hundred times, or twenty cubic millimetres of normal blood in two cubic centimetres of water. (Owing to the instability of the standard dilution of blood, glycerine jelly tinted to correspond with a mixture of carmine and picrocarminate of ammonia is used in its place.) The same volume of the blood to be tested is diluted till its tint is the

[2] Boston, 1870, p. 29.
[3] Practitioner, July, 1878.
[4] Clinical Society's Transactions, vol. xii., pp. 64-67.

same as the standard, and the degree of dilution necessary for this indicates the relation the hæmoglobin bears to that of normal blood taken as 100. Thus, if a dilution of 50 times gives the same tint as that of normal blood diluted 100 times, the amount of hæmoglobin is just 50 per cent. of the normal. The two solutions are best compared by means of transmitted light and not by reflected, as unfortunately was done in most of the cases presently to be referred to, and therefore in comparing my results obtained by the hæmoglobinometer with those which may be afterwards published by others, it must be borne in mind that they are from 5 to 10 per cent. higher than those obtained directly by transmitted light.

And here I would say that though at first I was struck by what I considered to be the inefficiency of the hæmacytometer and the hæmoglobinometer, and regarded them merely as scientific toys, a more extended use has fully persuaded me of their great value. Each requires a certain amount of practice before the results obtained be thoroughly trustworthy, but that practice once acquired, and it is soon and easily done, I believe the results to be perfectly reliable, and to be of use, not only from a pathological standpoint, but also from a clinical aspect, both with regard to prognosis and treatment.

In examining the quality of the blood we must remember that, besides its richness in corpuscles and in hæmoglobin, a third factor must be regarded—namely, the amount of serum which dilutes the hæmoglobin and the corpuscles. In many diseases, doubtless, these latter are reduced out of all proportion to the serum, but in other diseases, and especially, as far as I have seen, the acute specifics, such as scarlet and typhoid fevers, all these constituents of the blood appear to suffer in about equal proportions. This observation is confirmed by others made by Drs. Buchanan Baxter and Willcocks lately published.[5]

Thus by the hæmacytometer and hæmoglobinometer we are unable to compute the amount of corpuscles and hæmoglobin in the blood, but only the proportion which these bear to the serum.

Greater experience has fully convinced me of what I hinted at in my former paper, that our estimate of the number of white corpuscles is considerably above the mark. The maximum number has been stated as ·3 per hæmic unit, represented by two squares of Dr. Gowers' hæmacytometer—that is, 1500 corpuscles in the cubic millimetre of blood, but I believe that they very seldom exceed ·2 per hæmic unit, and more frequently than not fall even below this. The average corpuscular richness of the blood in anæmia, as shown by observations in thirteen cases, all of which were at the commencement of treatment below 75 per cent., is about 63 per cent.—a computation strikingly in accordance with my previously published results, where the average of ten cases was 62 per cent. As before pointed out by Dr. Gowers, myself, and others, the corpuscular richness of the blood is seldom accurately represented by the appearance either of the skin or mucous membranes. Not unfrequently have I examined the blood of young girls attending my out-patient room expecting to find a marked diminution in the number of the corpuscles, and, to my surprise, found it normal, or nearly so. Similarly, when at the commencement of treatment, the corpuscles may be considerably below the average, they regain the normal long before the symptoms have disappeared, and the patient has been restored to health. But though in such cases the corpuscles may be but little affected, the hæmoglobin is very far from being so. In nearly all cases the corpuscles became normal in from two to three weeks, while it takes three or four times that period for the hæmoglobin to reach anything like the usual percentage. For example, out of ten cases which I have charted with great care—observations being made weekly, and each case being so much improved that the patient no longer cared to attend,—in only one did the proportion of hæmoglobin exceed 90 per cent., in this case reaching 100 per cent.; while the average attained at the end of the treatment was only 70 per cent. The length of treatment varied from three to ten weeks, the average being six weeks. These facts are in the most striking contradistinction to observations made by Hayem. According to him, in anæmia treated by iron the hæmoglobin increases out of all proportion to the corpuscles—so much so that the richness in hæmoglobin may exceed the richness in corpuscles. Notwithstanding my very numerous experiments, I cannot recall to my mind, and certainly I have no notes of, any case in which the richness in hæmoglobin at any period of the treatment ever equalled the corpuscular richness—indeed only once has it come within 10 per cent. of it. In regard to this point, Drs. Baxter and Willcocks[6] similarly are in opposition to Hayem, and record results very similar in many respects to mine.

The amount of hæmoglobin at the commencement of treatment, as noted in fifteen patients, averaged 44 per cent., eight of these being 40 per cent. or below. Though, as remarked above, the corpuscles become normal in number long before the hæmoglobin, yet under judicious treatment the latter steadily increases in amount—about the same rate *proportionately* as the corpuscles. Thus, out of fourteen cases in which both the amount of corpuscles and the hæmoglobin were noted at the first visit, the former averaged 79 per cent. and the latter 44, a proportion of very nearly 9 : 5. After a week's treatment the percentage of ten of these was noted as 86 of corpuscles and 51 of hæmoglobin, a proportion of 8½ : 5; and after a second week the corpuscles had risen to 95 and the hæmoglobin to 55—that is, 8½ : 5.

In occupation these patients were mostly general servants, barmaids, pupil teachers, shop-girls, dressmakers, and such-like; and in age they varied from fifteen to twenty-five years old. In most of them there were hæmic murmurs heard at the base and in the carotids and jugulars; and in some apical murmurs, probably due to a temporary dilatation of the left ventricle, rendering the closure of the mitral valve imperfect; while increased tension in the pulmonary circulation was in many cases indicated by an intensified second sound heard at the pulmonary cartilage. As far as I have seen, hæmic murmurs have been not seldom absent when the corpuscular richness and the amount of hæmoglobin have been much below the normal. This requires further observation, and would be difficult of explanation unless under the supposition that there is a large excess of serum present, which, while it serves to dilute considerably the corpuscles and the hæmoglobin, helps also to maintain the quantity of the blood unaltered, and causes therefore no difference in the relationship between the quantity of fluid and the containing bloodvessels, which would be essential, according to many, for the production of hæmic murmurs.

I have watched with much interest the relation which the corpuscular richness of the blood bears to the catamenial periods. To do this exactly, of course, is difficult when patients are seen only once a week, as in most of my cases; but it appears to me that the catamenia generally diminish the number of corpuscles. This diminution is most marked if the blood be examined shortly before the onset of a menstrual period, though it is also found if the blood be examined soon after. This observation has been so frequently made that it cannot be a mere coincidence. Thus, out of twenty-two instances in which the blood was examined within three or four days either preceding or subsequent to the catamenia, in only three was there a continuous rise in the number of the corpuscles, while in four the previous rise was arrested, and in the remaining fifteen there was a distinct diminution either just before or after the onset of the catamenia. The amount of hæmoglobin appears to be less affected by the catamenia, and I have similarly noticed that it is less affected by other disturbing conditions which cause a decrease in the number of corpuscles. In other words, while the rise in hæmoglobin is not so rapid as the rise in corpuscles, it is more steady, and not so much affected by adventitious circumstances.

The treatment of the various cases differed considerably. In most, in addition to hygienic treatment, iron in some form or other was tried. The old and well-known compound mixture of iron, or Griffiths' mixture, gave as good results as any. The tincture of perchloride of iron was very valuable, and especially so when given in fairly large doses—fifteen to twenty minims. When given in smaller doses, as five minims, it did not effect nearly so much improvement in the blood condition. As a matter of experiment, arsenic (Fowler's solution) was tried in a number of cases by itself; though it occasionally effected a considerable rise in the number of corpuscles, this rise was very unsteady and liable to great fluctuations and relapses. Arseniate of iron, given in doses varying from one-sixteenth to one-third of a grain, frequently much improved the general condition, but did not effect any marked or steady change in the blood

[5] THE LANCET, March 13th, 1880.

[6] THE LANCET, March 20th, 1880.

condition—a fact easily accounted for by the small amount of iron present in the preparation.

In conclusion, I shall shortly relate the history of one patient. She was about twenty-one years old, engaged as a general servant, and had suffered from a want of good food and clothing. She came to my out-patient room complaining of headache, giddiness, palpitation, amenorrhœa, and the other usual symptoms of chlorosis. She was admitted as an in-patient on January 16th, when the hæmacytometer showed the percentage of corpuscles to be only 45. As a matter of experiment, she was ordered no medicine beyond a little camphor-water, but was put on good nourishing though plain diet. This was continued for a fortnight, during which time, though the general condition much improved, the corpuscles only rose 10 per cent. (to 56 per cent.) She was then ordered Fowler's solution of arsenic (five minims three times a day), with the same diet, for a week, during which time the number of corpuscles fluctuated considerably, rising at first to 64, but afterwards sinking again to 57 and finally to 52 per cent. She was, lastly, ordered iron on Feb. 3rd; from which time the corpuscles speedily and steadily rose in number, rising in three weeks nearly 60 per cent.; in other words, reaching 110 per cent. on Feb. 24th. As the catamenia had been absent for a long time, she was now ordered the liquid extract of ergot, and the iron omitted. During this period the corpuscles sank to 96 per cent., but, on the iron being resumed, rose again in three days to 102 per cent. At this point the catamenia recurred, and the corpuscles again sank to 96 per cent. immediately afterwards. This case is not chosen as being an especially favourable one; indeed, it is only typical of many others; and is chosen because it is the only one in a patient in whom frequent observations were made over a length of time. Subjoined are all the observations made.

Jan. 16th,	corpuscles 45	per cent.	
18th,	,, 48	,,	
20th,	,, 48	,,	diet only.
23rd,	,, 54	,,	
25th,	,, 52	,,	
27th,	,, 56	,,	
29th,	,, 64	,,	
31st,	,, 57	,,	arsenic.
Feb. 3rd,	,, 52	,,	
5th,	,, 55	,,	
7th,	,, 57	,,	
10th,	,, 66	,,	
12th,	,, 72	,,	iron.
14th,	,, 80	,,	
19th,	,, 94	,,	
24th,	,, 110	,,	
26th,	,, 110	,,	
28th,	,, 96	,,	ergot.
Mar. 5th,	,, 96	,,	
9th,	,, 102	,,	iron resumed.
11th,	,, 96	,,	menstruating.

Wolverhampton.

A FEW PRACTICAL REMARKS ON THE TREATMENT OF TROPICAL DYSENTERY.

BY J. H. COURTENAY, L.R.C.P. (LOND.), L.K.Q.C.P.I.
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To those who have read the published writings of many eminent East Indian medical practitioners, it must be a matter of some surprise that the brilliant results they have obtained from the ipecacuanha treatment of dysentery should not have caused a universal belief in its efficacy, but that this remedy has not been had recourse to in the West Indies, unless in a few exceptional instances, I could give abundant proof.

Some practitioners whom I consulted when I first had to deal with this disease recommended acetate of lead and opium; others advocated calomel and opium; others, small doses of ipecacuanha and opium. Within the past three years I have had to treat upwards of 200 cases of dysentery, and I can safely assert that until I absolutely adopted the ipecacuanha treatment my results were anything but satisfactory, and since then some of the most apparently hopeless cases have made a rapid recovery.

The chief difficulty that young practitioners experience is their inability to follow one definite line of treatment, so many varieties of administering ipecacuanha are advocated by the different writers on the subject. If I may, without presumption, attempt to simplify this variety of treatment, I think the best means to accomplish this end will be to make a brief statement of the course that experience and a careful study of the writings of others have led me to pursue.

As a preliminary measure, if the dysenteric phenomena have not displayed themselves in too marked a degree, I order half an ounce of castor oil with ten or fifteen minims of tincture of opium; the patient to be kept quiet and abstain from all solid and irritating food. This failing to check the disease, absolute rest in the recumbent position must be enjoined, twenty to twenty-five minims of the sedative solution of opium administered, and in twenty minutes afterwards thirty grains of powdered ipecacuanha in an ounce of water or syrup of orange-peel. The patient must then be kept perfectly quiet and abstain from all food, fluid or solid, for two or three hours. If the ipecacuanha is vomited immediately after it has been administered allow an interval of about half an hour to elapse, and then repeat the full dose again. In the further treatment of the case ten-grain doses of ipecacuanha should be given every six hours until convalescence is established; and when it is, to guard against a relapse, it is a wise precaution to give five or ten grains at bed-time for a few nights. In addition to this treatment a two-ounce starch enema containing twenty to twenty-five drops of sedative solution of opium, given at bed-time, has an admirable effect in controlling tenesmus and inducing sleep. With regard to nourishment I have never found, in adopting this line of treatment, that the nauseating effect of ipecacuanha produced any alarming intolerance of food; of course, food of the lightest nature, such as beef-tea, chicken-tea, arrowroot, milk, and the like, should only be administered. I think the use of stimulants should be dispensed with unless there is extreme exhaustion, and even then they should be given sparingly and extremely diluted.

And now it will be asked, Does the ipecacuanha treatment never fail, and is it an absolute specific for dysenteric disease? I can unhesitatingly answer, as far as my experience enables me to do so, that in the great majority of cases it most certainly does not fail, and that its effects are often magical; but I have met a few cases where no precautions or varieties as to administering small or large doses of the drug seemed to be able to avert the absolute intolerance of it. Under these circumstances I administered a bismuth and soda mixture containing five drops of sedative solution of opium in each dose. I also gave a powder containing mercury with chalk and compound ipecacuanha powder every four hours, and an opiate enema at night. Several writers on the subject say that when this intolerance is present hepatic complications are to be dreaded, but happily in the cases I have alluded to no such difficulties had to be encountered, and they quickly yielded to treatment; but I consider that when a patient suffering from dysentery is unable to take ipecacuanha his chances of recovery are seriously lessened by such inability. My utmost expectations will be fully realised if this very imperfect outline of the treatment of tropical dysentery enables some new-comers to grapple with a disease that admits of no parleying with, and if the re-opening of the subject is sufficient at least to arouse the attention of those who feel a great difficulty in yielding up preconceived ideas.

THOMSON'S AMETROMETER.

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I AM desirous to call attention of the profession in this country to a very ingenious instrument, which Dr. Thomson of Philadelphia, its inventor, has named the ametrometer. It is intended to measure the refraction of the eye without the aid of lenses; and it appears likely not only to accomplish this object, but also to effect a great saving of time for those who are habitually engaged in such investigations.

The ametrometer consists of a graduated bar, about a foot long, pivoted near one extremity, and carrying two

very small gas jets, one of which is stationary near the pivot, while the other slides freely to and fro along the bar. The patient is placed five metres from the instrument, and the lighted gas jets are separated, the bar being in a horizontal position. To an emmetropic eye, or to an ametropic eye fully corrected, the two flames will appear clearly and sharply defined; but, to an unaided ametropic eye, each flame will appear surrounded by a luminous band or halo, produced by the dispersion circle on the retina. The width of this band will be the measure of the ametropia, the amount of which may therefore be read off upon the graduated bar by bringing the flames so near together that the margins of the two luminous bands come into contact. The patient is then directed to move a slip of coloured glass slowly over the pupil, from the temporal side inwards. If the case be one of hypermetropia, the temporal side of the halo will remain white, while the nasal side is coloured by the glass; and, if it be myopia, the reverse of these conditions will obtain. In astigmatism, the luminous bands will be elliptical instead of circular; and, by turning the bar upon its pivot, the two ellipses may be brought into such a relative position that their major axes, if touching, would be in a continuous line. The bar then coincides with the meridian of greatest ametropia, which may be measured by bringing the bands into contact in the ordinary way. The instrument is furnished with a graduated arc, upon which the angular position of the bar may be read off, and it may then be turned to a position at right angles with the former, and the refraction of the opposite meridian measured in turn. With a patient of ordinary intelligence, the examination may be completed with great rapidity. It is hardly necessary to say that the eye examined must be fully under the influence of atropine or of duboisin, and that the other eye must be covered.

The graduation of the bar is such that the refraction may be read off in inches upon one side of it, and in dioptrics upon the other. For the latter, each division measures two and a half centimetres, and is again subdivided into two.

In testing upon myself unknown degrees of ametropia and astigmatism, artificially produced by lenses, I have found the indications of the instrument perfectly accurate, but I have not yet had sufficient opportunities of observing how far it is to be trusted in the actual ametropia of patients. In certain eyes, probably from irregularities of refraction in their lenses, the diffusion halo is extended in some directions by prolonged rays, and some care will be required in causing patients to discriminate between these rays and the boundary of the diffusion halo itself. On this and on some other points of interest I shall hope to be able to make observations worthy of future publication; and my present object is to enlist the aid of others in the work. The ametrometer either is, or shortly will be, obtainable from Mr. Hawksley.

Wimpole-street, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium

UNIVERSITY COLLEGE HOSPITAL.

CASE OF CANCER OF THE UTERUS TREATED BY CHIAN TURPENTINE.

(Under the care of Dr. GRAILY HEWITT.)

FOR the following notes we are indebted to Mr. J. E. Hine, obstetric assistant.

Mrs. O——, aged forty-eight, married, two children, no miscarriages, was admitted April 28th. The catamenia had ceased three years and a half before. There was no family history of cancer. She first noticed a vaginal discharge one year before admission. The discharge became offensive, and increased in quantity during the last three months. Bleeding was first observed in February, and continued in varying amount. There had been constant pain in the back and right iliac region for a similar period.

On admission, the cervix uteri was very close to the vaginal outlet, and presented a broad surface the size of a wine-glass, rough and excavated, with a very sharp hard edge. The cervix was welded firmly to the adjacent structures all around.

The emulsion of Chian turpentine, containing eight grains in each dose, was given three times a day. The patient took this regularly till June 10th, when, owing to vomiting, it was changed for the pill of Chian turpentine, five grains three times a day. Syrup of the iodide of iron was given at the same time. She had an opium pill at night to relieve pain. Vaginal injections of warm water and iodine were used.

On June 21st the edge of the os uteri was thinner than when previously examined, the result of the destruction of a portion of the thickness of the os. There was evidence of ulcerative action, but in other respects the condition remained much the same.

Whilst the patient was in the hospital she progressively lost weight. On May 7th she weighed 7st. 4lb.; on June 17th 6st. 11lb.

The discharge had been very abundant, clots frequently being passed. The pain had increased in severity. She suffered latterly from vomiting, rejecting nearly everything she took. Accordingly, nutrient enemata were given.

Note.—Though there is no evidence that the disease has extended either locally or generally, the patient is at present decidedly worse than she was a month ago.

LINCOLN COUNTY HOSPITAL.

CASE OF CANCER OF THE RECTUM; COLOTOMY; RECOVERY.—CASES ILLUSTRATING USE OF PLASTER-OF PARIS BANDAGE IN HIP DISEASE.

FOR the following notes we are indebted to Mr. W. J. Cant, house-surgeon.

Cancer of rectum and vagina; colotomy.—S. W.——, a cachetic-looking woman, was admitted (under the care of Mr. Sympson) August 10th, 1879, complaining of difficulty in passing her motions, severe pain in the rectum and vagina, and frequent bleedings. She said that twenty-two years before she had a fistula, which frequently gathered and discharged, and had never thoroughly healed. She stated that she was losing flesh and appetite, and was very much troubled with constipation. In the beginning of the year 1879 she took a dose of castor oil. The bowels not having been moved for about one month, the oil acted freely; but she noticed that some of her motion was passed per vaginam. On examination a dense nodulated and ulcerated mass was found filling up the rectum and vagina, discharging a fetid sero-sanguineous fluid. The motions were passed with difficulty through a fistula connecting the vagina with the rectum. The pain became more and more severe, the sanguineous discharge more profuse, and the bowels more difficult to relieve.

On October 2nd, 1879, colotomy was performed. An oblique incision, four inches long, was made in the left lumbar region, the tissues were carefully divided, and the colon exposed, two silk sutures were passed through the integuments and the gut, which was divided between them and secured to the edges of the wound by the four silk sutures, after which eight metallic sutures were introduced, and the gut accurately adapted to the edges of the external wound. The wound was dressed with carbolic oil and tenax. Fæces passed through the opening every day without much pain; firm and well-formed motions were passed.

Four days after the operation the wire sutures were removed. The wound was then healing rapidly, and there was only a slight amount of inflammation around, and a little pain at the umbilicus. Ten days after the operation all sutures were removed, and zinc ointment was applied around the edges of the wound, which looked healthy. Her appetite gradually improved, the patient gained flesh and felt much stronger, and the pain and hæmorrhage had greatly diminished. About three weeks after the operation she was allowed to get up and move about, a convex waterproof pad being applied over the artificial anus, from which she had no pain.

She was made an out-patient Nov. 1st, when she was well enough to resume her ordinary occupation, in which she was still engaged on April 18th, 1880. The appetite re-

mained good, and her strength was only slightly diminished, although the cancer was gradually increasing in size, and the pain was frequently felt, for which she takes twenty drops of solution of hydrochlorate of morphia occasionally.

Plaster-of-Paris bandage for hip disease.—The application of plaster-of-Paris splint in hip disease seems to afford an effectual and inexpensive method of treating this disease, maintaining complete rest for the joint, with extension, and giving the patient at the same time the benefit of moving about. It would seem to be equally useful in acute and chronic cases, giving great relief with usually rapid improvement in general health. It may be used in those cases where abscesses have formed around the hip-joint, whether discharging or not; in the former case an opening must be made in the splint. The mode of application differs very little from that employed by Dr. Sayre in spinal disease. A flannel bandage is wound firmly round the limb extending from a little below the knee to about one inch above the anterior superior spine of the ilium, the muslin bandages having had plaster rubbed into them are moistened and then applied. Plaster-of-Paris made about the consistence of cream with water should be smeared on during the bandaging to give extra firmness on drying. It is an advantage to have the patient suspended during the application. Both hip- and knee-joints are immovably fixed. An iron patten is fastened to the sole of the boot belonging to the foot of the healthy side, so as to raise it two or three inches from the ground, thereby allowing the leg on the diseased side to hang extended, motionless, from the body, when the patient gets about by means of crutches.

R. S—— was admitted with all the symptoms of acute hip disease. She had frequent elevation of temperature (100°) with exacerbations of pain and night startings. She remained in hospital for seven months, being kept in bed during the whole time with only slight improvement. The plaster-of-Paris bandage was applied and she was made an out-patient, being able to move about easily without any pain. In one month she was able to leave off the splint and walk without crutches, the movement of the joint being free. Her health was very much improved and was free from pain.

S. W—— was admitted with hip disease, having excessive pain on the slightest attempt at movement. The patient was kept in bed for six months and counter-irritation was applied round the hip without any marked improvement. The plaster splint was put on and she was able to move about without pain. The general health rapidly improved. The bandage was kept on for some time, as pain was complained of when the heel was concussed.

H. D—— had disease of right hip with a large abscess on the buttock. The patient was very emaciated and complained of great pain. The plaster splint was put on and the patient was made an out-patient a few weeks afterwards. He came to the hospital six weeks afterwards very much improved in health and was free from pain; he could move about easily with the crutches. The bandage was removed to see the condition of the abscess, which was found to have slightly enlarged. About six ounces of pus were taken away by means of the aspirator, and the bandage was again applied.

Reviews and Notices of Books.

The Hysterical Element in Orthopædic Surgery. By NEWTON M. SHAFFER, M.D., Surgeon in charge of the New York Orthopædic Dispensary and Hospital, Orthopædic Surgeon to St. Luke's Hospital, N.Y. G. P. Putnam's Sons. 1880.

THE fact that severe diseases and distortions of the spine and joints may be very exactly simulated by the obscure condition usually known as hysteria, has been recognised by surgeons in only comparatively recent times. Brodie and Skey both mention it and describe cases, but Paget in this country and Esmarch in Germany have done more than any others to draw attention to a fact of very great importance and only too generally overlooked. The simulation of local organic disease may be and often is, so exact that only the most careful and, usually, repeated observation can establish the diagnosis, and probably most surgeons of experience are able to recall cases that they have mistaken before they were sufficiently alive to the occurrence of this "neuromimesis." Dr. Shaffer's essay was originally read before the New York Neurological Society, but is well worthy of publication in its present form. Several cases of hysterical disease of the knee, hip, spine—simulating both angular and lateral curvature—and club-foot are described, and the points relied upon for diagnosis discussed. We can only briefly note those affirmed to be of most general application. While the age and sex have some weight it is well to remember that the male sex is not free from neuromimesis, nor is it infrequent before puberty, and it may be developed in patients who have no knowledge whatever of the symptoms of the disease feigned. Pain and muscular rigidity usually come on together, and the expressions of the former are often exaggerated and voluntary, while in the local disease rigidity precedes pain, and the pain shows itself in a peculiar expression of countenance and by involuntary signs, and often during sleep. Hysterical rigidity varies from time to time, can be overcome by continuous traction, or by drawing off the attention by sleep, opium, or chloral; the rigidity of joint disease is constant, cannot be overcome by traction, sleep, or narcotics, but only by complete anæsthesia. The muscles of the limb merely waste from disuse, and show no diminution of reaction to the faradaic current in hysteria, while in true joint disease there is exaggerated wasting and great loss of electrical reaction. In the simulated disease there is no alteration in local temperature nor swelling, unless from superficial hyperæmia and œdema, as from counter-irritants, and spots of hyperæsthesia both near the joint and at a distance are frequently observed. In hysterical disease of the spine there is no limitation of the natural movements if a careful examination is made, and the deformity often results from relaxation rather than spasm of muscles, and the scoliosis is unattended with rotation of the vertebræ. Hysterical talipes is peculiar in having flexion of the toes commonly superadded. Dr. Shaffer's illustrative cases are well and honestly reported, and although the author does not attempt to clear up the mystery in which these conditions are shrouded, he certainly marks out the way in which surgeons may best avoid confusing the so-called real and feigned joint diseases.

Elements of Modern Chemistry. By ADOLPHE WURTZ, Member of the Institute, Honorary Dean, and Professor of Chemistry of the Faculty of Medicine, Paris; Member of the Academy of Medicine, &c. Translated and edited with the sanction of the Author, from the fourth French Edition. By WM. H. GREENE, M.D. With 132 Illustrations. London: W. Swan Sonnenschein & Allen. 1880.

M. WURTZ'S excellent little manual is already known in its original language to many English readers, the high and well-earned reputation of its author drawing instant attention in England to all his works. But Dr. Greene, who is evidently an accomplished chemist as well as a good translator, has done well to give us an English edition, adding thereby one more good elementary text-book to several which we already possess.

M. Wurtz is an experienced teacher, and has succeeded very well in giving enough and not too much matter fo beginners, a task by no means easy. He has, moreover, judiciously blended the theoretical and the practical; and as the exposition is always clear, it is not wonderful that the book has been popular and useful. Nevertheless we cannot say that it is perfect, or even that it is better than some English text-books. The arrangement adopted in the organic portion is not happy, the nomenclature is in some cases inferior to that now adopted in England, and some important modern discoveries and theories are either omitted or too slightly noticed, especially if they do not belong to France.

THE LANCET.

LONDON: SATURDAY, JULY 17, 1880.

THE present meeting of the General Medical Council is by far the most discreditable meeting in its history. Before the meeting there was nothing to lead even judges to think that the Council could find excuse for sitting more than three days. The Executive Council had met less than a month before, and there seemed little in its references to the Council to occupy the latter body more than a few hours; but when the first programme of business appeared on the day of the Council's assembling, it was evident that the members had no intention of a short sitting. The programme literally bristled with questions which, when once opened, admit of indefinite discussion. These questions had reference chiefly to preliminary education. The first thing that the Council did was to spend two days in debating whether to put the subject into the hands of a committee merely to prepare it for discussion. Twenty-four of the leading members of the profession in the United Kingdom spent two days of their precious time, and £400 of the Council's funds, in making up their minds to have the subject put into shape for them on the third day. Of course in this discussion speakers aired all their views on the whole range of subjects, actual and desirable, included in preliminary examinations. At the end of the second day the Council arrived at the great conclusion to have a Special Committee to arrange for further high debate. This began on Friday and continues to the time of our writing. Every conceivable question was raised, from the claims of Greek to those of Dutch, and most of the questions were raised three times over, and the speakers had so many opportunities of repeating themselves. Sir WILLIAM GULL said very truthfully: "We fight our battles three times over, and never come to any result," and added plaintively: "We shall go on so *for ever* — yes, for ever, till time shall be no more!" Dr. ANDREW WOOD was more fortunate than Sir WILLIAM. He was struck with the humorous aspect of the situation, as Sir WILLIAM was the grave one, and even this redoubtable champion of the Council was constrained to say, when Dutch appeared on the scene, "This is really becoming ludicrous—where are the examiners to come from—are we to send over to Holland for one?" The ludicrousness and the gravity of the situation are not realised by merely studying the course of this debate. We have to consider that the Greek Question was the subject of an exhaustive debate in 1866, and that the subject of Mechanics was the subject of exhaustive debate and definite ruling only last year. Mr. SIMON and Dr. FERGUS in 1879 carried the resolution that the subject of Elementary Mechanics of Solids and Fluids—meaning thereby Mechanics, Hydrostatics, Pneumatics, and Hydraulics—be made compulsory. This year the Council resolves that there shall be an examination in the Elementary Mechanics of Solids and Fluids, and Mr. TURNER and Dr. ANDREW WOOD move—and carry their resolution—"That the examination in the Elementary Mechanics of Solids and Fluids shall comprise the elements of Statics, Dynamics, and Hydrostatics. Hydraulics are left out in the cold, though what they have done since 1879 to merit such treatment is known only to the members of the Medical Council. But so the time is spent of twenty-four gentlemen than whom individually it would be difficult to find twenty-four more eminent or more estimable within the bounds of the profession, and so the money of the profession is wasted and squandered.

We must not be misunderstood. We do not mean to deny that the speeches have been good and the discussion interesting. Some of the speeches have been exceedingly able. Nothing could be better or more effective than Professor TURNER'S account of the Examination in Arts in the University of Edinburgh; than Sir JAMES PAGET'S discourse on the question of making Greek compulsory—we do not speak of the view or the argument, but of the speech as a speech; than Dr. HAUGHTON'S strong Irish denunciation of all shams in the examinations; than Dr. ROLLESTON'S repeated defences of the practical subjects as distinguished from those which an urgent age can dispense with, or than Mr. SIMON'S vindication of Mechanics. But the Medical Council does not meet to hold fine discussions and to repeat its own conclusions. It professes to be an instrument for doing certain work, and it is constantly showing itself to be a most ineffective and costly instrument. As a debating club it would win a prize. As a medical authority it is condemned even by its own best members, and by the universal consent of the profession to which it owes all its importance. The question forces itself, Who is to blame for all this? Just when it is of supreme importance that the Council should behave itself with dignity and discretion it makes a most signal exhibition of the worst faults that were ever attributed to it by its most conscientious critics. Who is to blame? Answers vary. Some say the PRESIDENT; that he labours under a defect of force and power of leading and advising. We cannot but admit that the PRESIDENT lays himself open too constantly to such criticism. But he is by no means solely to blame for the discredit that has accrued to the Council by the meeting now concluding. There are other members of the Council who, by their personal character, their long connexion with the Council, and the recognised value of their time, would have been justified in appealing very seriously to the Council on the first day of its meeting. But they sat silent. Mr. SIMON made on Thursday, July 8th, an appeal, but it was an imperfect one. He should have proposed a motion expressive of the objections to the course the Council deliberately entered on. But he contented himself with a few words of earnest protest. He came in for severe castigation at the hands of Dr. ANDREW WOOD, and was not supported by members of the Council, from whom better things might have been expected.

WE learn from one of our Northern contemporaries that Mr. J. T. HIBBERT, M.P., the Parliamentary Secretary of the Local Government Board, replying to a question regarding the accuracy of certain statistics submitted to a public meeting of anti-vaccinators at Oldham, has written a letter of which the following is given as the text:—"It is scarcely fair to

say that 'in 1875 there perished in England 26,000 infants who would have lived had vaccination been as little in vogue as in 1874.' In the first place the increase of 26,000 deaths after allowing for increase of population, is caused principally by two diseases—viz., diarrhœa and bronchitis, the former having risen from 5143 deaths in 1874 to 15,477 in 1875, and the latter from 2506 deaths to 14,506, which together show an increase of 22,334 deaths. It cannot be said that either of these two diseases is largely influenced by vaccination. The deaths of infants under one year from small-pox have fallen from 1074 in 1874 to 142 in 1875, and while I admit that in 1871 and 1872 the deaths were 3161 and 2656, the average annual percentage of deaths from small-pox of infants under one year was largely diminished. On the other hand, the return shows an increase of deaths from syphilis of infants under one year from 255 in 1874 to 1554 in 1875, in my opinion one of the most unsatisfactory features in connexion with vaccination, and one which leads me to support the proposed modification of the Vaccination Law now before the House of Commons."

By what process of reasoning Mr. HIBBERT connects the reputed increase of deaths among young infants from syphilis with vaccination we shall not pretend to say, and do not care to conjecture. By far the most important consideration arising out of this letter (if we are to accept the text as accurate) is that the Parliamentary Secretary of the Local Government Board accepts without qualification one of the most pernicious and least justifiable assumptions of the anti-vaccinators. Further, he avers that so far as he is concerned with the Vaccination Acts Amendment Bill before the House of Commons, of which he is a promoter, he supports it because he regards the alleged increase of infantile syphilis as connected with the practice of vaccination! What relation between the provisions of the Bill and this question can exist is not easy to understand, unless it be conceived that Mr. HIBBERT sees in it the beginning of the end of compulsory vaccination. Be this as it may, we have the spectacle of the President of the Local Government Board justifying the Bill on the ground of political expediency, and the Parliamentary Secretary of the Board intimating, as it would seem, that he supports it on "anti-vaccination" grounds. This intimation must tend to cast doubts upon the real motives underlying the Bill, and will no doubt receive attention in its further progress.

Our own position in regard to the measure is well defined, and should be intelligible. We are concerned to maintain the compulsory principle in full efficiency. If it were politically possible to enforce vaccination on the law-breakers, by having their children vaccinated under magisterial supervision, we would advocate that plan of procedure. To borrow an idea from the anti-vaccinators, the policeman should take the child from the mother and hold it while the beneficent operation, which in its principle and practice embodies the genius of *preventive* medicine, is performed. This policy is, however, in the present state of public opinion, impracticable. It remains, therefore, to look at the question from the practical standpoint, and viewing the matter thus, we feel that it will be an advantage to get rid of the grievance of multiple fines. Obviously nothing is gained to the cause of vaccination by the infliction of fines. The circumstance that the parent is mulcted for the offence of refusing to have his child vaccinated does not protect it from the small-pox, or, in obstinate cases, procure compliance with the law. The law-breaker who will not obey the statute after two fines have been inflicted is not likely to do so afterwards. The first fine may be assumed to act as a warning to the negligent; the second has probably as much influence as it is possible to bring to bear on the obstinate. After this second infliction, unless the community is wise enough to *enforce* vaccination by direct means, it is simply creating a claim to martyrdom to pile up penalties. The law is, in fact, placed in the ludicrous position of having to tease its antagonist without being able to compel his obedience. A man who happens to have money at his command, either his own property or a fund placed at his disposal by some Society, may earn considerable distinction in the eyes of the unthinking crowd by his payments of fines, and if he chooses to put up with a few days' imprisonment as a first-class misdemeanant, he may become famous. This child's-play is the cause of infinite harm to the interests of public health. It tends to disguise the real position of affairs; and so falsifies appearances, that instead of seeking solely the good of the people, the law seems to be striving, vainly, to enforce a practice against which those who oppose it revolt. We further object to this misrepresentation because we are convinced that the parents who refuse to have their children vaccinated are few, and do *not* represent even a small class of society. There are always turbulent spirits in a large community, and at times when there is a lack of burning questions on which to "agitate" such persons will fall back on social questions. The *Anti*-Contagious Diseases Acts, the *Anti*-Vivisection, and the *Anti*-Vaccination, movements are the only opportunities for public excitement which just now offer themselves. If the grievance-mongers lose their "cry" by the passing of this Bill, we shall be glad, and the maintenance of the Compulsory Vaccination Acts will be assured. This is the view we take of the matter, and to the policy suggested by such a view we adhere.

IT is not more difficult to cross Niagara upon a tightrope than to steer a course along that narrow channel which separates free-will from necessity, health from disease, insanity from criminality. For some days a man lay under sentence of death, concerning whom it had been proved that he suffered from what was probably a delusion arising from insanity; a wretched woman is committed for trial on a charge of murdering her maid-servant, and concerning whom it is admitted that she laboured under a similar delusion—viz., that she was watched by persons who intended to do her evil; a medical officer has been committed for trial on a charge of manslaughter, because, it is alleged, that he imposed insufficient restraint upon a man who committed a homicidal act (the man who committed the act being at the same time committed on a charge of *wilful* murder!); and a lady has been committed for an offence against the lunacy laws for receiving lunatics into an unlicensed house, and without orders or certificates.

The best comment we can make upon the custom which is prevalent, of allowing common juries to judge between criminality and insanity, is to call attention to the dilemma into which coroner and jury have fallen in the matter of the

Polish Jew who killed an inmate of the City of London Union Infirmary. The facts of the case are well known to our readers. A Polish Jew named SALEWSKAL, suffering from some form of delirium, was admitted to the infirmary, and was placed in the imbecile ward. Dr. BANCOMBE, the medical officer, asked another of the inmates named HARRIS, who knew the Polish language, to go to the ward and converse with him, and at the same time he warned the attendant in the ward to "keep his eye" upon the Pole. During the absence of the attendant SALEWSKAL fractured HARRIS's skull with a chair and killed him. The result of the inquiry before the coroner is this, either that the jury recognise SALEWSKAL as a sane man and commit him for *wilful* murder (for it is obvious that no delirious patient can have any will), and at the same time commit the medical officer because he did not impose *unlawful* restraint upon a person capable of exercising both will and judgment; or that the jury recognise SALEWSKAL as a lunatic who ought to have been more carefully restrained, in which case the charge of manslaughter (against the medical officer) might possibly stand, but the charge of murder (against SALEWSKAL) most certainly could not be sustained. Supposing the latter view to be the more correct of the two, and supposing SALEWSKAL's condition to be curable, what effect will the anxieties of his trial have upon his mental condition?

On the whole this is the prettiest sample of "crowners' quest law" which we have encountered for many a long day, and by their verdict the jury have done a terribly cruel thing either to a poor invalid who merits all our deepest sympathy or to a professional gentleman whose only fault has been that he did not break the law.

The offence for which Mrs. RUTLEY stands committed is for disregarding the 90th section of the Act of 8th and 9th VICT., chap. 100, by which it is enacted that no person (except a committee) may for profit take charge of a single lunatic without an order and certificates. Mrs. RUTLEY is also charged with receiving more than one lunatic into an unlicensed house. If these charges be proved against her, the offence is clear. The prosecution will have to show: 1st, that the persons were insane, and, 2nd, that restraint was imposed. If restraint has been imposed upon persons who are not insane, Mrs. RUTLEY has laid herself open to an action at law by the aggrieved parties.

In the case of the unhappy man SWEETLAND, the point which the jury were called upon to decide was whether the crime had its origin in drunkenness or insanity. The distinction between the two is not always easy, for it is well known and universally admitted that suspicion of others is a very common symptom in delirium tremens. The prisoner was a wild, dissipated character, and had been "on the drink" for three days prior to the murder, and had consumed very nearly a pint of raw gin just before he committed the act. Had he committed suicide instead of murder, a verdict of temporary insanity would have been returned to a certainty; and had he made his will on any of the three days preceding the act, that will would have been set aside to an absolute certainty. Unfortunately he committed the very act which in the case of SALEWSKAL afforded the most unanswerable proof of *insanity*, and a jury have consequently handed him over to the executioner. Supposing we admit that SWEETLAND was drunk and not mad, we have in the case of MAINWARING a precedent for altering the punishment to one of penal servitude for life; and should he, as a prisoner, afford undoubted evidence of insanity, he could then be removed to an asylum, and be liberated on a ticket of leave should his recovery be fully established. As it is, the sentence imposed upon him seems to have been respited without deciding the question of insanity, in which we are principally interested.

Annotations.

"Ne quid nimis."

THE GROCERS' LICENCE QUESTION.

THE EARL OF ONSLOW did good service on Friday last in the House of Lords by again calling attention to the great question of Grocers' licences. In the course of his remarks his lordship said:—

"Grocers' spirit licences had been largely on the increase. Those licences could be refused only on two statutable grounds—either that the person or the house was not entitled to such a licence. The grocer paid for his licence £28 11*s.* 2*d.* a year; while the licensed victualler, with a house valued at £100 a year, now paid £16 10*s.*, and under the change proposed by the Chancellor of the Exchequer would in future pay £30. The number of grocers' licences was likely to increase in consequence of the change. There was an objection to those licences being granted by magistrates because of the invidious position in which these functionaries must be placed if they had two applicants of equal respectability from the same street; but he should like to see power given to the magistrates to say the number of those grocers' licences which were to be granted and to put them up to public tender. In that way the number of grocers selling spirits would be kept down. It was a convenience to many persons to be able to buy spirits in the shops of their grocers, but it had been stated in evidence to the Select Committee that much mischief was caused by the facility for the purchase of spirits which the shops of those licensed grocers afforded to women, and that some of the grocers consented to enter as 'goods' the spirits had by women. Indeed, one gentleman told the Committee that this was so common in Scotland that whenever he found the entry 'goods' in a grocer's account he at once understood it to mean spirits."

The Bishop of Carlisle asked, "Why should not the entering of spirits as 'goods' be treated as a fraud, and why should not the selling of spirits to boys or girls under the age of sixteen be made penal?"

The Earl of Kimberley, on the part of the Government policy of letting this practical question drift, intimated that,

"In his opinion, and in that of the majority of the committee, the evidence given before them completely failed to prove that any appreciable increase of drunkenness could be ascribed to those particular licences. They were licences which were possibly liable to attack on various grounds, but no direct evidence had yet been produced of an immediate connexion between them and the prevalence of drunkenness. He had not found the assertions with regard to alleged increase of drunkenness among women supported by the evidence; and as to grocers' licences, they were only 2000 or 3000 out of a total of 100,000 licences for the sale of intoxicating drinks. He merely made these remarks to show the noble lord that he had not lost his interest in the subject. He did not express any opinions on the subject; he wished to be quite unfettered with regard to any Bill which the Government might think it proper to bring in."

Such a statement of official opinion leaves the question in something worse than a quagmire. The Select Committee began by excluding evidence—in the only practicable shape,—then drew an unwarrantable inference from the supposed absence of evidence! The Government has confounded the whole business by accepting a Report based on proceedings thus faulty.

SANITARY REGULATIONS OF THE AUSTRIAN NAVY.

THE Minister of Marine of the Austro-Hungarian Empire has recently issued a circular to all the seaport and maritime authorities. Several cases of small-pox had occurred on board some merchant ships, and this has incited the Government to formulate more stringent and precise regulations in respect to this disease. The circular in question is written in the Italian and the Illyrian languages, and these are its principal passages:—1. Any sailor or passenger, whether showing evident symptoms of small-pox or only suffering from an eruption of a doubtful character, shall not be allowed to land. 2. Sailors, subjects of the Austro-Hungarian Empire, must be provided with a certificate proving that they have been vaccinated during the previous ten years. 3. If during the journey a case of small-pox should occur, the patient must be at once isolated, placed on special diet, and the use of wines or spirits absolutely forbidden. 4. The excreta, &c., of the patient must be disinfected with sulphate of iron, and then thrown into the sea. 5. The patient, when convalescent, shall not be allowed to associate with the other persons on board till the period of desquamation is terminated. 6. The cabin occupied by the patient must be disinfected according to the system to be subsequently described. 7. When there are several cases of small-pox the entire ship must be disinfected.

With regard to the method of disinfection, many experiments have been made both in Germany and Austria, which have resulted in the recommendation of the following well-known system: Sulphur to the extent of twelve grammes per cubic metre of space to be disinfected is to be burnt in an earthenware basin, placed in the centre of some sand, to prevent all risk of fire. All the linen clothes, &c., are to be hung across the cabin, which is to be hermetically closed for three hours, and then exposed to the strongest possible draught for twelve hours. Then the walls, floor, ceiling, &c., are to be washed with a solution of one kilogramme of lime, or one-half a kilogramme of chloride of zinc per hundred litres of water.

NURSING AND NURSING.

The Council of the Nightingale Fund have issued, along with their report for 1879, reprints of two articles from the *Edinburgh Medical Journal*, one entitled "Nurses and Doctors," written by the Lady Superintendent of Nurses in the Edinburgh Royal Infirmary: the other, on the Nursing in the Edinburgh Infirmary, by Dr. Joseph Bell. We welcome this protest (for such it is) from the Executive of this Fund against that hysterical sentimentalism which is being introduced into the practice of nursing in certain hospitals and institutions, and which is a mischievous caricature of the system of nursing represented by the Nightingale Fund. There is considerable risk of nursing in hospitals being seriously prejudiced by the fussy energy of women, weak and kindly, who have latterly taken to nursing as a sentimental service or mission rather than as a serious duty, but who lack any real knowledge of those domestic arts which form no inconsiderable part of a nurse's calling, and do not possess the aptitude for learning, without which a good nurse is an impossibility. Ladies of this sort are prepared to do anything—except the painful, wearisome details of nursing, and having almost everything to learn, and none of the habits or temper of mind which makes the nurse's duty sit comparatively light upon the person who undertakes it; they hold themselves, after the study of a few books and a superficial acquaintance with the brighter side of hospital life, capable of instructing all. The paper, written by the female Superintendent of the Edinburgh Infirmary, indicates the distinction between nursing as a serious duty for cultivated women, and nursing as the sentimental, not to say hysterical, outcome of unacknowledged, but not the less real, idleness. The old system of nursing was bad in some of its details, but, as she says, it had its redeeming qualities, and not the least important of these, still insufficiently apprehended, was the fuller apprehension of the wants of the patients and the greater approximation between the feelings of patient and nurse. We question whether, if the matter were carefully looked to, the evils of the old system, such as they were, are not outdone by many of the evils of the "new system," so-called. Who familiar with the class of nurses in question has not been made conscious that the patient has been made to serve the self-beatification of the nurse, and not the occasion for the development and manifestation of the most lovable of the characteristics of womanhood? What hospital surgeon or physician has not, moreover, had anxiety and trouble from the growing tendency among these nurses to profess to be outraged in feeling (heaven save the mark!) by the ordinary and necessary incidents of surgical and medical practice in ward life? The publication, by the Nightingale Fund, of the papers which have been referred to, will serve to make evident to the public, when the question of "a new system of nursing" is under discussion, that a distinction has to be made between one new system and another, and happily a standard of the new system which should be followed is to be found in the wards of St. Thomas's Hospital, and in the work of the Nightingale Fund.

THE VIRGINIAN PRUNE.

FEW drugs have a wider repute in the United States, and have failed more completely to gain a position in the practical therapeutics of this country, than the Virginian prune bark. In spite of the recommendations of Dr. Clifford Allbutt and others, it is still almost unknown to the bulk of practitioners. An instructive and fairly complete account of the history and uses of the drug, by Dr. Van der Espi, has recently been published in the Belgian *Journal de Médecine*, and some of the facts there mentioned may be interesting to our readers. The tree grows in all the States of the Union, but it attains the largest size in the south-western States. Everywhere in the northern States it is reputed one of the most useful of indigenous remedies. According to Proctor, the bark yields a volatile oil, of pale-yellow colour, which has the odour of bitter almonds, and contains hydrocyanic acid in such quantity that two drops will kill a cat in five minutes. The prussic acid does not exist as such in the bark, being formed, as in bitter almonds, by the action of emulsion on amygdaline. It contains also tannic and gallic acid, starch, resin, salts of lime, potash and iron, a fatty matter, woody fibre, and a red colouring matter. These facts have been confirmed by the author of this memoir, and he has further proved that the amygdaline exists in the Virginian prune bark in a crystallisable form. Its quantity is, however, very variable; it is different in each kind of bark; that of the root contains more than that of the trunk, and the latter more than that of the young branches; it varies also with the age of the tree, with the time of year at which it is collected, with the age of the bark, and with the mode in which it is preserved. The contact of moisture causes the emulsion to act upon the amygdaline, and the bark is therefore best preserved in zinc cases, hermetically closed. The red colouring matter he finds to be analogous to the soluble red substance found by Pelletier and Caventou in the chinchona bark.

A gramme of the powdered bark has a taste which is at first astringent and afterwards bitter, and resembles that of prussic acid. It causes a sensation of warmth at the

epigastrium, and appears to have a tonic (or stimulant) action, increasing the general sense of energy. Diminished sensibility, retardation of the pulse, and lowered temperature follow, due, no doubt, to the prussic acid which is formed. Strong doses, taken several times a day, were found to reduce the pulse from 65 to 50. When the dose exceeds three grammes, it causes a sensation of fulness at the stomach, nausea, and diarrhœa. Larger doses cause dangerous symptoms, due to the hydrocyanic acid, which appears to combine with the hæmoglobin of the blood.

The value of this substance in medicine appears to depend chiefly upon the constituent tannin and prussic acid, and it is said to be useful in debility of the digestive organs, general debility, accompanied by local or general irritation, in the convalescence from local inflammations, in acute febrile diseases, and in painful affections of the stomach. It has been recommended in intermittent fever. Tannin has been held in high repute in the treatment of ague (Chancerel, Pezzoni), and so also has prussic acid in the form of bitter almonds. The prune bark is much used in America in the treatment of phthisis; it is said to have a marked effect on the pyrexia, on the cough, on the expectoration, and on the night sweating. It has been used by Van der Espi with success in whooping-cough. Hydrocyanic acid is an old remedy in the affection. In this country the bark has been used chiefly in heart disease, and it is said to be of very marked value as a cardiac sedative, most useful in the cases in which digitalis is not well borne. In bronchitis the sedative effect of the prussic acid on the cough, and of the tannin upon the expectoration, is said to be valuable. It has been recommended as an external application to ulcers and as an application to the eye in catarrhal ophthalmia. In the latter Van der Espi asserts that it is much more useful than simple tannin. These are the chief alleged uses of the drug, but the list does not by any means exhaust the class of diseases in which it has been recommended, and which comprehends a large proportion of known maladies. The bark is administered as a powder, in an infusion, a syrup, or a tincture. By evaporating the tincture, an extract is obtained which the Americans call prunin or cerasin, the dose of which is from two to ten grains. Possibly the reason why it has been so little employed in this country is the deterioration of the bark before it reaches us.

SEAMEN'S HOSPITAL SOCIETY.

THE Seamen's Hospital as a charitable institution is unique of its kind. Seamen of all nations not only receive relief from it when sick or otherwise distressed, but are retained within its walls till sufficiently strong to resume the duties of their calling. From the last annual report we are pleased to learn that the finances of the institution are in a flourishing condition. Not only have the subscriptions increased, but the reserve funds now amount to over £120,000. With this fund it is proposed at some future date to build a permanent hospital, the present building being only lent by the Government. With so large a sum in hand, it is to be hoped the Committee will see their way speedily to commence operations, for the building they now occupy is certainly not suited to the requirements of a general hospital. Besides, it is out of the way of the sick sailor. Formerly, when the old *Dreadnought* lay in the river, ships as they passed up to dock dropped their sick as they passed. Since the removal of the institution ashore this is seldom done, and the ship goes on to port and the sick sailor has to be transported back to Greenwich. Practically when once in port it is easier for the sailor to go to the London, Guy's, St. Bartholomew's, and the German hospitals than make a long journey across the river back to Greenwich. There is very little doubt that of late an increasing number of sick sailors, especially those suffering from acute diseases, have found their way to the wards of the hospitals we have named. At present the Seamen's Hospital is on the wrong side of the river, and should the Committee determine to build they should endeavour to secure a site in the very midst of the docks. The establishment of an out-patient department at the docks will in no way meet the case, as this arrangement will not get over the difficulty of the transportation of acute cases across the river back to Greenwich. The Committee hold a noble sum of money in trust for the sick sailor, and we hope it will not be frittered away. Till, however, they begin to build, they have from the interest of this money an ample sum to aid towards their yearly expenses, and can well afford to allow the current of private charity to flow for a time in directions which urgently require it. It is anomalous for one hospital to be accumulating a prodigious reserve, whilst another, like Charing-cross, has to close some of its wards from lack of funds to provide for its ordinary requirements.

EXPLOSIONS.

THERE can be no question as to the substantial accuracy of the finding in the case of the recent explosion of a mixture of gas and common air in a main near the Tottenham-court-road, to the effect "that the deaths were caused by an explosion, that that explosion was caused by a light being ignorantly placed to a pipe by Hawkes, the gas having been introduced into the new main by some defect in the valve in Howland-street." The jury appended to their verdict a rider, giving it as their opinion that additional care should be taken by the Gas Light and Coke Company in the testing of new mains. Another explosion precisely of the same class, and from a like cause, has occurred at Bilston. It is, as the *Daily Telegraph* in an able leader on the subject points out, a grievance "that we should have gasmen as ignorant in their ways of dealing with gas as the untrained householder. . . . Everybody knows that it is quite safe to light an ordinary burner in a room; so that if any leakage is comparable to the common gas jet no harm will result by applying a burning match to it. Yet in that case the leakage must be an escape under strong pressure. If not, if it be a mere ooze, if the gas has stagnated either in a long pipe with a free opening to the air, or in a confined space to which air gets access, then as the atmosphere and the gas are of different degrees of heaviness a process of diffusion takes place. The gas comes to the surface, and air forces its way behind, where it may remain mixed with the gas in the proportion of one part to fifteen. If in these circumstances a light be applied the surface film burns, and its flame runs back until it ignites the explosive mixture behind—that mixture being the amalgamation of inflammable vapour and air, which has been formed in obedience to the law of diffusion." This is a very fair popular account of the facts, and if it should have the effect of opening the eyes of the gas companies to the nature of the article with which they have to deal—teaching them the rudiments of their business, so that they can educate their servants up to the point which is necessary to public safety,—the *Daily Telegraph* will have done good service. Meanwhile, M. Kæuffer, in the *Annales de la Société Medico-Chirurgicale de Liège*, has a lesson for us, of the medical profession, and for dispensing chemists and the public, which we are glad to be able to reproduce. The facts recited are easily forgotten, and should be kept in memory by prescribers. In some instances it is even possible that they may be unknown. We quote from the *Canadian Journal of Medical Science*:—

"M. Kæuffer has published, in the *Annales de la Société Medico-Chirurgicale de Liège*, an interesting study of pharmaceutic preparations, which in certain cases, often not well marked, may give rise to explosions. Amongst these very numerous substances we will cite only the most important.

The author, for example, while preparing a pomade composed of chloride of lime, flowers of sulphur and other substances, saw small detonations produced, and the entire mass entered into deflagration. Another time, essence of turpentine having been poured into a bottle in which remained some sulphuric acid, the vase burst. These explosions may be produced in many other cases. A German journal reports that in America, one of the most dangerous substances, nitro-glycerine, is found in all the homœopathic pharmacies. The hypophosphites may also be the cause of accidents. In one case, the mixture of hypophosphite of lime, chlorate of potash, and acetate of iron produced a violent detonation, which burned the preparator and put his life in danger. The trituration of the hypophosphite alone may be dangerous when the substance is very pure. The solutions of oxidising bodies in glycerine demand the greatest prudence. Thus, chromic acid in glycerine has been able to give rise to a violent detonation. In this case the solution should be made drop by drop in order to avoid accidents.

"The solution of permanganate of potash in glycerine presents an analogous danger. Pills of oxide of silver have equally been able to determine on the one who carried them a formidable explosion. The iodide of nitrogen, which may be formed in certain circumstances, is also detonating. Now, in America there are frequently seen prescriptions ordering a mixture of tincture of iodine with ammonia, which necessarily form iodide of nitrogen; if the explosion is rarely produced, it is because the trituration is generally made in the presence of water, which prevents this result. In any case, this mixture should only be made in very small quantities. A pharmacien ought then to refuse to fill a prescription for which tincture of iodine is to be mixed with an ammoniacal liniment; he ought also to refuse to make every mixture of chlorate of potash mixed with sulphur and analogous substances. Thus chlorate of potash mixed with tannin is dangerous, and these bodies ought only to be delivered separately, in the case where the physician prescribes them in substance, and not under the form of gargle. A tooth-powder, pointed out by Price, composed of chlorate of potash and cachou, and used with a dry brush, would be capable of producing a detonation in the very mouth of the patient. Price also noted danger from concentrated solutions of permanganate of potash in alcohol and water, which may be filled but never delivered in uncorked bottles; if not, explosion follows infallibly.

"Chlorate of potash with glycerine also constitutes a dangerous mixture. Once a gargle prescribed by one of the most renowned physicians of New York, containing equal parts of chlorate of potash, perchloride of iron and glycerine, exploded with great violence, not in the pharmacy, but in the saddle-bag of the bearer.

"Another time, a similar mixture exploded, only some time after its preparation, under the influence of the rays of the sun. This time the explosion caused the burning of the house. Lately there has been noticed an explosion of a powder containing chlorate of potash and hydrochlorate of morphine."

ROYAL COLLEGE OF SURGEONS.

FROM the annual report of the receipts and expenditure of the College from midsummer-day, 1879, to midsummer-day, 1880, and which has just been published, it appears that the income from all sources amounted to £15,612 17*s.* 5*d.*, derived principally from fees paid by candidates for the diplomas of the College producing the large sum of £12,683 15*s.* Rents from chambers adjoining the College and dividends on stock yielded £2527 3*s.* 1*d.* Fees paid by members of the College on their election to the Fellowship, and which formerly added so largely to the funds of the College, only produced thirty guineas during the past year. Members of the Council and Court of Examiners paid on their admission as such just 100 guineas. Receipts from Trust Funds amounted to £247 7*s.* 10*d.* The annual expenditure amounted to £15,482 19*s.* 7*d.* The largest item appears in fees paid to the members of the Council—Courts and Board of Examiners—viz., £6326 18*s.* Salaries and wages to the large staff of officers and servants in the three departments of museum, library, and office, is not large in £3950 3*s.* 5*d.* For taxes, rates, and diploma stamps, £1348 18*s.* 6*d.* was required; the lecturers receiving £144 18*s.* Museum specimens, &c., £606 11*s.* 8*d.* Books for the library, £368 6*s.* 11*d.* Notwithstanding these necessarily heavy expenses there appears a balance at the bankers of £384 14*s.* 7*d.* The accounts are all carefully examined by a committee of auditors consisting of six members of the Council.

MEDICAL NEWS FROM RUSSIA.

ON the initiation of the Medical Society of Tver, and with the support of the Municipal Council of the Zemstvo, it has been decided to establish a colony for the insane in the vicinity of the city. The colony is to give accommodation to 400 patients, and it is estimated that each patient will cost 632 roubles annually. The municipality have made a grant of 253,615 roubles towards the establishment of the colony, that sum representing 50 per cent. of the presumed total cost.—At the sitting of the Municipal Council of St. Petersburg on the 24th ult., the question of the deficiency of hospital accommodation in the city was debated. The deficiency was estimated at 2000 beds, and it was considered whether these should be provided by temporary hospital buildings or by weeding the hospitals of convalescents and placing them in buildings which might be prepared for them at a less cost than hospital buildings proper. In the end the Council determined to make a grant of 200,000 roubles for temporary hospitals and 30,000 roubles for the establishment of a convalescent institution.

THE DEATH OF MR. TOM TAYLOR.

THE medical profession will think regretfully of the death of Mr. Tom Taylor. He was a man of culture, and outside his work as a dramatist had a claim on the respect of the community. As one of the principal contributors, and in late years the editor, of our facetious contemporary *Punch*, Mr. Tom Taylor was always appreciative of the efforts made by the medical profession to relieve suffering and promote the public good. In his writings for the stage and for the leading satirist of the day and the age, he showed himself ready and anxious to help, instead of sneering at, the cause of public health promotion and the endeavours made in good faith, if not always successfully, by THE LANCET to inaugurate and advance useful sanitary and hygienic reforms. It is only fitting that we should record the regret we feel at having lost so excellent a friend, and in so doing we express the personal respect and regard which a large circle of friends in the medical profession entertain for the deceased gentleman.

THE GOVERNMENT AND THE IRISH FEVER CASES.

THE Report of the medical men sent to the districts where fever prevails is in the hands of the printers, and may be expected daily. Four nurses, too, have been sent down to the cases from the Hardwicke Hospital.

KING'S COLLEGE HOSPITAL will be closed from the 17th inst. until the 19th September (inclusive). Arrangements have been made to transfer the more serious cases to other hospitals. We hear that Professor Lister will remove about twelve of his more urgent cases to a private hospital in Fitzroy-square, so that they may continue under his personal supervision.

THE Medical Council has done one new thing which will require grave consideration at another time. It has passed a Resolution imposing a new examination on medical students, or on students before entering the profession—an examination corresponding to the Preliminary Scientific Examination of the London University.

THE

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1880.

Thursday, July 8th.

THE General Medical Council resumed its sittings on Thursday, the 8th inst., Dr. Acland, President, in the chair.

A report was read from the Committee on Ophthalmology and Midwifery with reference to the memorials received from ophthalmic surgeons and from the Obstetrical Society. The report stated that the memorials had been submitted to the licensing bodies, and answers had been received from all of them except the Universities of Cambridge, Durham, and Queen's, in Ireland. It added:—"With reference to ophthalmology, the opinion of the bodies is almost unanimous that, under the present arrangements of their respective examinations, the subject of ophthalmology receives its fair share of attention, and that it would not be desirable either to require attendance on a special course of lectures on ophthalmology as part of the curriculum for a medical student, or to make ophthalmic surgery a distinct subject of examination (separate from surgery) at the pass examination for a licence to practise. The Committee see no reason to dissent from that opinion of the licensing bodies, and they accordingly do not advise the Council to recommend that a special course of study of Ophthalmology, or a distinct examination in that subject, should be required. With reference to the subject of Midwifery, there is considerable difference in the requirements by the different licensing bodies as to the extent of study, some requiring as many as a hundred lectures, and others fifty or fewer, and some requiring as many as twenty cases of labour to be attended, while others do not require more than six. Seeing that the Council have not hitherto deemed it expedient to specify in their Recommendations the exact quantity of study to be certified in any particular subject, the Committee do not advise the Council to follow an exceptional course with regard to Midwifery. With reference both to Ophthalmology and to Obstetric Medicine, it appears to the Committee that if the Council should hereafter have to reconsider the conditions of the medical curriculum as a whole, part of such reconsideration must of course consist in the Council's satisfying itself that each of the several branches of practical study will receive its due share of attention from every candidate who proposes to present himself for examination; and the Committee can at present only suggest that, whenever the time for such general reconsideration may come, it will be well for the Council to refer again to the two memorials which are now reported on."

Dr. HUMPHRY moved that the report be entered on the minutes, and that copies should be sent to the memorialists.

Dr. HAUGHTON objected to dealing with the subject of ophthalmology on the same footing as the important subject of midwifery. He proposed that the latter subject should be at once considered by the Council, and that Dr. Humphry's motion should apply only to the former.

The consideration of the question was postponed till after the adjourned debate on preliminary education.

Dr. BANKS, in resuming the discussion, defended the Queen's University of Ireland from the imputation of neglecting preliminary education, and compared the requirements of that body with those of the Medical Council. He said that the great difficulty of the University had been the deficiency in the middle-class schools in Ireland—a deficiency that would no doubt be remedied by the measure on intermediate education passed by the late Government. He maintained that the University had fulfilled its mission to the utmost of its ability, and endeavoured to raise the standard of general and medical education. He had no doubt that better days were dawning, and that better prepared candidates would be sent up for the matriculation examination. As a proof of the stringency of the examinations of the University, he alluded to the small number of rejections of its student by the Army Board.

Dr. SCOTT ORR vindicated the Faculty of Physicians and Surgeons of Glasgow from the imputation of neglecting preliminary education, and asserted that its examinations were quite abreast of the requirements of the Medical Council.

Dr. PYLE made a similar vindication with reference to the University of Durham.

Dr. ROLLESTON alluded to the defects which had been pointed out in Glasgow, and expressed his regret that the Scotch bodies had opposed the scheme of conjoint examination.

Mr. TURNER complained of the course adopted by Dr. Storrar, and compared his speech to the Commination Service. He explained the nature of the examinations of the Scotch universities. He said there was no entrance examination to the Faculty of Arts in any of the Scotch universities, in which respect they resembled the Oxford and Cambridge Universities; but the Universities of Edinburgh and Glasgow had arranged to bring such an entrance examination into operation next winter. The examinations in general education for medical students, he said, were largely conducted by non-professional examiners, and were fully up to the requirements of the Council. Referring to the system of "remanet" examination, denounced by Dr. Storrar, he said that in Scotland the matriculation certificates of the English universities were accepted as far as they went, but the holders were required to be examined in additional subjects not included in those certificates. He objected to unduly harassing the student in regard to his preliminary education, and approved of the principle of one examining body accepting the certificates of another as far as they went. He opposed the suggestion of Dr. Storrar to refer the question to a Committee. There had been committees enough appointed already, and the time had arrived when the whole question should be considered by the Council itself. The standard ought no doubt to be raised, and then the preparation of students would be proportionately improved. The subjects of examinations, he thought, might be increased. He had a list of subjects which he was prepared to recommend, but this was perhaps not the fitting occasion for bringing it forward.

Mr. SIMON thought that the Council should at once deal with the reports of the Branch Councils, instead of referring to a Committee questions which had again and again been reported upon. He did not object to referring new questions, such as a revision of the system of preliminary examination; but to refer matters already reported upon would only be ridiculous. He thought it would be unwise, in the present provisional position of the Council, to enter upon any large prospective undertakings. They had all been advocating considerable and radical changes in the licensing system; and the constitution of the Council itself had been challenged; and until questions of that kind were settled, prospective resolutions, such as those proposed, would be of little use. For twenty years the Council had recommended that preliminary examinations should not be conducted by the licensing bodies; but the recommendation had not been regarded. He was himself prepared to take a vote upon the subject whether such examinations should be considered satisfactory for the purposes of the Medical Act. The question should be settled by the Council, and not referred to a Committee.

Dr. WOOD deplored the speech of Mr. Simon, which he said was tantamount to a proposal to the Council to abdicate its functions and declare itself incompetent. He agreed that it was useless to refer the question under consideration to a Committee. He denied the statement of Dr. Storrar that nothing had been done in regard to the improvement of preliminary education. The recommendations of the Council had been largely adopted by the licensing bodies. He admitted that they declined to adopt the recommendation to abandon their preliminary examinations, and they intended still to decline to follow that recommendation. The Council had its remedy, and could take the bodies, if it desired, before the Privy Council. The present Government had stated that it was not at present prepared to legislate; and it appeared to him, therefore, that the present was a breathing time for the Council, in which it could undertake the reforms which it considered necessary. He protested against waiting for possible legislation, which might not come till the Greek kalends. A waiting policy would only be throwing water on the licensing bodies in their efforts to meet the views of the Council in regard to education and examination. A number of important proposals were upon the programme for the present session; and he hoped those

questions would be considered in detail by the Council. With regard to the proposal to take away from the corporations the right to conduct preliminary examinations, he maintained that the Council had no more right to take away that power than it had to take away the power of conducting professional examinations. The examinations were conducted by eminent and competent men, and they were not a sham but a reality. In the body which he represented there had been at a recent examination 101 students examined in English, and of these 82 passed and 19 were rejected. In Latin, of 134 examined, 78 passed and 56 were rejected. In arithmetic, of 93 examined, 52 passed and 41 were rejected. In algebra, of 112 examined, 69 passed and 43 were rejected. In Euclid, of 125 examined, 99 passed and 26 were rejected. In mechanics, of 66 examined, 40 passed and 26 were rejected. In French, of 87 examined, 52 passed and 35 were rejected. As to the system of "remanets," he contended that it was not open to the objections brought against it. He saw no reason why a student who had passed a creditable examination in Latin, French, and arithmetic, and failed in algebra and Euclid, should not be allowed within a reasonable time to come up again for the latter subjects. He knew it was contrary to the system adopted in England, but they claimed in Scotland to be allowed to judge for themselves on that point and act according to their own genius. No doubt in some of their professional examinations there was a great deficiency in regard to grammar and spelling; but how did they know that some of the students had not been examined by the great universities? In some cases it had been proved that such was actually the case. He had no doubt that many improvements might be made, but he asked the Council to pause before raising the standard too high, and thus unduly to limit the number of general practitioners required by the country.

Mr. TEALE moved as an amendment, "That a Committee be appointed to draw up a series of propositions to be submitted to the Council, which shall embody the various motions on the programme in reference to preliminary examinations, and such other questions on the same subject as it shall seem desirable to such Committee to submit to the vote of the Council; this report to be brought up at the opening of the meeting on Friday, in order that a distinct vote may be passed upon them during the present session; and that the Committee consist of the following members:—Mr. Teale (chairman), Dr. Humphry, Dr. Storrar, Dr. A. Wood, Mr. Turner, Dr. Leet, Rev. Dr. Haughton, and Dr. Fergus." He objected to a waiting policy, as recommended by Mr. Simon, as it was very doubtful whether the subject would be taken up early by the Government; and it was very desirable to arrive at some definite conclusions on certain points. Many proposals had been made, and it would be a saving of time if a Committee were appointed to formulate the subjects for the consideration of the Council.

Dr. A. WOOD seconded the amendment.

Dr. HAUGHTON objected to the appointment of a Committee as proposed by Mr. Teale, believing that the desired result would not be obtained in time for discussion by the Council during the present session.

Dr. ROLLESTON also opposed the amendment, and spoke in favour of Dr. Storrar's resolution.

Dr. STORRAR said he was in no way opposed to the proposal of Mr. Teale, and was willing to adopt it instead of his own motion.

Dr. FERGUS urged the importance of the Council having some check upon preliminary examinations.

Dr. A. SMITH suggested that the Council should resolve itself into a Committee to consider the question.

Dr. STORRAR then replied, and asked permission to withdraw his motion in favour of that proposed by Mr. Teale.

Dr. HAUGHTON objected to the withdrawal of Dr. Storrar's motion, and it was accordingly allowed to stand.

Mr. Teale's amendment was then put and carried, and was also adopted as a substantive motion. Dr. Storrar's motion therefore fell to the ground.

On the motion of Dr. A. SMITH, seconded by Dr. QUAIN, the standing orders of the Council, as revised by the Committee appointed for the purpose, were received and adopted.

An application for registration from Mr. John Dwyer having been referred to the Council by the Executive Committee, with the recommendation that the evidence produced of his having acted as surgeon in the public service prior to 1858 be accepted as a qualification for registration, the application was granted.

A similar application was received, and granted, from Dr. William Wotherspoon Ireland, who had acted as assistant-surgeon in the East India Company's Service prior to 1858.

A certificate was read of the conviction of George Frederick Totter (M.R.C.S. Eng. 1867, L.R.C.P. Lond. 1867) for manslaughter in January last at the Leeds assizes. The offence was that of riding over a boy, who died from the effects of the shock. The prisoner, it appeared, had been fined on several occasions for furious driving and once for drunkenness. The Council deliberated on the case in private, and resolved that it was not deemed expedient to remove the prisoner's name from the Register.

The Council then adjourned.

Friday, July 9th.

The Council reassembled under the presidency of Dr. Acland.

OPHTHALMOLOGY AND MIDWIFERY.

Dr. HUMPHRY moved the adoption of the Report of the Committee on Ophthalmology and Midwifery.

Dr. HAUGHTON objected to the reception of the report. It would be wrong, he said, to allow the arrangements of the licensing bodies for the teaching of midwifery to continue for another year in their present disgraceful condition, but he had no objection to postpone the consideration of ophthalmology, or any of the other "ologies" pressing for recognition. It often happened that a young man was appointed to a regiment or to a ship where he had to deal with midwifery cases, of which he was unable to take charge. The University of Dublin, in the view of such contingencies, had required from its licentiates a six months' course of lectures on midwifery, and a six months' attendance on a maternity, including thirty cases personally attended. Ophthalmology was an ornamental subject that was not of the pressing importance of midwifery, and its consideration might well be postponed. He proposed that the Council should recommend the plan adopted by the University of Dublin.

Mr. MACNAMARA seconded the proposal, and said that the College of Surgeons in Ireland was alive to the importance of the subject of midwifery, in which it had a distinct examination, and it did not allow a student to come up for a surgical licence until he had brought forward satisfactory evidence that he had been engaged in the study of midwifery. As to the number of cases of labour to be attended, that was a matter which should be left to the Branch Councils, but some amount of attendance should always be required. The Committee declined to recommend any exceptional dealing with midwifery; but he contended that there should be a special examination in a subject of such serious importance.

Dr. A. WOOD said that the subject was everywhere made part of the medical curriculum. It was considered by them all as a most important subject. The Council, however, ought not to lay down minute details as to the number of lectures or labour cases that should be attended, which might well be left to the bodies themselves. In Scotland it would be impossible to send each student to thirty cases of labour. Before the requisite number of accouchements could be provided it would be necessary to import a colony of Irishwomen.

Dr. A. SMITH thought that the Council should take care that every practitioner should be well qualified in midwifery; but the details of the subject might be left to the licensing bodies.

Dr. QUAIN said that midwifery was already one of the subjects a knowledge of which was required by the Council; and he did not know that anything further was needed.

Mr. SIMON said that the rule had hitherto been to recommend certain subjects of study, but not to prescribe the details of the lectures, &c.; and that rule had been followed in reference to midwifery. He thought the rule a safe one, and hoped it would be adopted by the Council. The Committee had not, as suggested by Dr. Haughton, proposed to deal with midwifery and ophthalmology as on the same footing, though it had dealt with them in the same report.

Dr. BANKS objected to laying down details of study and examination in midwifery, as proposed in Dr. Haughton's resolution.

Dr. HAUGHTON said he should be willing to modify his amendment by stating that the Council recommended a course of lectures in midwifery and a course of instruction in practical midwifery, without stating the number of attendances required.

Dr. HUMPHRY, in reply, said that the Committee had thrown no slur upon the study of midwifery, and had expressed no opinion as to the comparative value of that subject and of ophthalmology. The only question was, whether they were to deal exceptionally with midwifery, treating it in a different way from all other subjects. No such legislation as that proposed by Dr. Haughton had taken place in reference to anatomy, surgery, or other subjects, and he saw no reason for it in reference to midwifery.

The amendment was then negatived, and the motion for the adoption of the report was put and carried.

GREEK.

Dr. LEET proposed, "That on and after the 1st of January next Greek be included among the compulsory subjects of the preliminary examination for medical students." He stated that the Apothecaries' Hall in Ireland included Greek among its subjects of preliminary examination for medical students, and it did not feel disposed to lower its standard. Dr. Leet urged the importance of a knowledge of Greek in the way of general culture, and as affording a clue to the meaning of scientific terms; and cited the opinions of several eminent educationalists to that effect. He called attention to the fact that many years ago the Council had adopted Greek as a compulsory subject, but had never given effect to its resolution.

Mr. MACNAMARA seconded the motion.

Dr. A. SMITH said that Greek was now, according to the standing orders, an optional subject. He thought it should be compulsory; but he objected to the inadequate examination to which some students were subjected: it was no guarantee that a useful amount of knowledge of the language had been acquired.

Dr. STORRAR said he had fought the battle of Greek at the Council as long as he could, but he finally gave it up. Modern education was increasingly disregarding Greek, and he believed that before long the language would only be cultivated by a few scholars for its own sake. The London University gave its degrees in Science, Medicine, and Law, without a knowledge of Greek; and it was considered that German gave the student many of the educational advantages supposed to be limited to the older languages. Considering the limited time that could be devoted to preliminary education, he should vote against Dr. Leet's proposal.

Mr. SIMON, while acknowledging the great importance of Greek, believed that if it were made compulsory the supply of medical men for the public would be unduly limited.

Dr. ROLLESTON regretted that he could not vote for making Greek compulsory, which would, he said, exclude a number of boys attending the modern public schools, where Greek was largely superseded by modern languages and science.

Dr. FERGUS cited the opinions of several authorities, including Professor Huxley, against rendering Greek compulsory, and urged that there were other subjects, having a more direct bearing upon medicine, that would equally exercise the student's mental powers.

Dr. HAUGHTON, in supporting Dr. Leet's motion, said that from time immemorial law, physic, and divinity had stood side by side; but the proposal to lower the educational standard of medical men by declaring Greek unnecessary was the first step to placing them in an inferior position. He was aware that many of the Greek examinations of medical students were of a very unsatisfactory character; but the Council could always raise the standard. In the Apothecaries' Hall in Ireland the Greek examination was of a very high-class. Nothing was so distressing as to try and teach an uncultivated brute of a student who had never learned Greek, and he hoped that the Council would declare the subject compulsory.

Dr. BANKS supported the motion, and said if Greek were excluded the profession would enter on a downward course.

Dr. PETTIGREW said it was not proposed to exclude Greek, but only to allow it to remain, as he thought it ought to be, an optional subject. He believed that there were many other subjects equally valuable as instruments of intellectual training; while there were some students possessing excellent talents, and worthy to enter the profession, to whom the study of languages was a matter of great difficulty.

Dr. HUMPHRY regretted the loss of Greek, but thought that they must bend before the wind. A large number of schoolmasters had reported to the University in Cambridge in favour of giving up Greek as a compulsory subject, adding that many of the boys were prevented by its retention from entering the University. The subject was accordingly no longer compulsorily required; and if that were the case at the University, it could hardly be contended that it should not be the case with the medical profession. If the standard were too high, there was a great danger that the number of persons entering the profession would be greatly reduced, to the disadvantage of the public.

Dr. A. WOOD reminded the Council that they were legislating for a minimum; and if they erected a barrier which it was very difficult to pass, a great evil would be inflicted upon the community.

Sir W. GULL said it was not honest to require Greek of ordinary medical practitioners. Such knowledge of Greek as the majority of medical students would acquire was nothing but a sham. He did not desire to depreciate scholarship; he wanted Greek for his idle hours as an amusement, but he did not require it for the practice of his profession. He ridiculed the notion of employing a few well-known passages in the Greek New Testament as a test of the student's knowledge of the language.

Sir JAMES PAGET said he agreed with Mr. Simon that the question in this case was what was the least amount of knowledge which a man must possess in order to be a safe practitioner. To say that a man could not acquire enough knowledge to allow him to begin to learn medicine unless he knew Greek was somewhat startling. He had a profound respect for a knowledge of Greek, but only for that which might fairly be called knowledge which would affect the whole of a man's life, or the whole of his mental character. But it would be absurd to suppose that that kind of knowledge could be possessed by all medical students. All that could be expected would be but a smattering, which would vanish in a year or two of serious work in the profession. It might be said that all the other subjects were in the same position, but though a man might come to the study of medicine with only a very elementary knowledge of mechanics or chemistry, that knowledge must almost of necessity grow with every step he took in the profession. That was not so with regard to Greek. Most persons must have noticed in reading medical literature that men often covered very bad English by the use of Greek words, which were ill understood and badly expressed. No doubt it was true that the derivation of English words was frequently taught in schools, but that method might give utterly false explanations. Such words as "asphyxia" and "hypertrophy" would be wrongly explained by their derivations. Much of the discussion seemed to proceed on the supposition that it was proposed to give up Greek, but that language was only to be made optional. He hoped that the Council would not declare that no man could be deemed fit to begin the study of medicine unless he possessed a knowledge of Greek.

The PRESIDENT said when this subject was first discussed in 1866, he had the honour of representing the University of Oxford, and therefore he thought it his duty to consult some of the skilled scholars connected with that University, among others Mr. Goldwin Smith and Dr. Temple, the then Head Master of Rugby. They all agreed in saying that whatever was done should be done thoroughly. It would lower the literary character of the profession to require the mere minimum. To make Greek compulsory would be to reverse the policy of the Council. It was true that it was at one time intended to enforce it after a certain date, but before that time arrived, the Council reconsidered its decision, and decided that it should not be made compulsory.

The motion was put and lost, the numbers being, for it 4; against 17.

Dr. HAUGHTON then proposed: "The General Medical Council being of opinion that the existing Preliminary Examination in Arts is unsatisfactory and insufficient, propose to replace it by the following Examinations:—(1) An Examination, previous to Registration, in the following subjects only:—(*a*) English; (*b*) Arithmetic; (*c*) Latin; (*d*) Elements of Geometry; (*e*) Elements of Algebra. (2) An Examination, to be passed not later than at the end of the first year of professional study, in the following subjects:—(*a*) Greek; (*b*) Elements of Mechanics. (3) An Examination, to be passed not later than at the end of the second year of professional study, in the following subjects:—(*a*) French or German; (*b*) Elements of Hydrostatics and Optics." He said he had been long satisfied that the preliminary arts examination was overloaded, and the consequence of its being so, and of there being seventy-two bodies for conducting it, was that the examination was becoming a farce. He there-

fore thought the Council should lay down a definite regulation. He would like to see more attention paid to handwriting and spelling. The resolution passed in July last year distinctly recognised the principle on which he had founded the latter part of his resolution.

Dr. LEET seconded the motion.

Dr. ROLLESTON objected to it on the ground of its multiplicity. He particularly objected to the suggestion to postpone a part of the preliminary examination till after the student had commenced his professional studies. He submitted as an amendment: "That the treble examination proposed by Dr. Haughton is in principle inadmissible."

The amendment was seconded by Mr. Simon, and supported by Dr. Pettigrew. On being put to the vote, the amendment was carried by a large majority, and subsequently was agreed to as a substantive motion.

Mr. TURNER moved: "That the Preliminary Examination should be raised to the following minimum standard—(*a*) English to include literature, history, grammar, composition. (*b*) One ancient language, either Latin or Greek. (*c*) One modern language, either French or German. (*d*) Arithmetic, including vulgar and decimal fractions. (*e*) Elements of mathematics, comprising algebra, including simple equations, geometry, first three books of Euclid or the subjects thereof. (*f*) Elements of mechanical philosophy, comprising statics, dynamics, hydrostatics, and optics; it being understood that the examination in this branch may be passed either as preliminary or as part of the first professional examination." After pointing out the differences between his proposal and the present regulations, he moved the adjournment of the debate; and the Council shortly afterwards adjourned.

Saturday, July 10th.

The Council reassembled under the presidency of Dr. Acland.

The Council went into Committee on Mr. Turner's motion with reference to preliminary examination.

Dr. HUMPHRY desired to make an explanation with reference to an agendum on the programme of the day. It would be remembered, he said, that a resolution had been passed by the Council in July, 1879: "That the subject of 'Elementary Mechanics of Solids and Fluids—meaning thereby Mechanics, Hydrostatics, Pneumatics, and Hydraulics'—be no longer recommended by the Council as an optional subject of preliminary education, but be recommended as one of the subjects 'without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered,' it being understood that the examination in this branch of knowledge may be passed either as preliminary or as first professional; and that it be referred to the Executive Committee to amend to this effect sub-Section 6 of Section 4, and sub-Section 1 of Section 23, of the edition for 1879 of the Council's standing *Recommendations*." Various bodies had modified their examinations in accordance with that resolution, but scarcely any examination had been instituted in hydrostatics, hydraulics, &c. One of the difficulties that had been mentioned was that if that class of subjects were made compulsory, one other language would be also made compulsory, which the Executive Committee felt was not the intention of the Council. It appeared that the intention of the Council could not be carried out in the way desired. The subjects in question did not form part of the preliminary examinations of the great examining bodies recognised by the Council, and under all the circumstances the Executive Committee had resolved:—"That the Executive Committee, having fully considered this resolution in all its bearings, finds that there are such difficulties connected with carrying it into effect, that it deems it right to refer it back to the General Council for reconsideration." The Council, he thought, ought to be cautious in prescribing additional subjects for the preliminary examinations. The great educational bodies would not modify their examinations in accordance with the wishes of the Council if changes were frequently made; and unless some great object were to be obtained, the Council should hesitate before making alterations.

Mr. SIMON thought that the Executive Committee had been outstepping its functions in not giving effect to the resolutions of the Council. Dr. Humphry's speech would have been appropriate enough last year when the subject was brought before the Council, but it was inappropriate now. But that the general question of preliminary education was about to come before the Council, on Mr. Turner's motion, he should have felt it his duty to propose a vote of censure on the Executive Committee.

Mr. TURNER moved, "That the preliminary examination be raised to the following standard:—(*a*) English Language, including literature, history, grammar, and composition. (*b*) One Ancient Language, either Latin or Greek. (*c*) One Modern Language, either French or German. (*d*) Elements of Mathematics, comprising arithmetic, including vulgar and decimal fractions; Algebra, including simple equations; Geometry, including the first three books of Euclid or the subjects thereof. (*e*) Elementary Mechanics of Solids and Fluids, it being understood that the examination in this branch may be passed either as preliminary or previous to the first professional examination." He said it was not proposed to bring these subjects into the examinations at once, as that would be hardly fair to the students who had commenced their studies. It might be desirable that there should be a year's or two years' grace. He proposed to make distinct motions in reference to each of the subjects, and would first propose that an examination in the English language form part of the preliminary examination.

Sir JAMES PAGET seconded the motion.

Dr. ROLLESTON thought that the question should be referred to a committee, which could discuss it fully and with advantage before the next session of the Council.

Dr. A. WOOD thought it would be absurd to expect a knowledge of English literature from a lad sixteen or seventeen. He objected to making the changes proposed by Mr. Turner, believing that the present regulations were quite sufficient.

Dr. HAUGHTON seconded the amendment.

Mr. TURNER suggested that it might be convenient, for the sake of discussion, to strike out the word "language," and he would simply propose that there should be an examination in "English."

This was unanimously adopted.

Mr. TURNER then proposed: "That the examination in English embrace language, composition, and grammar, and that the General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate; (*a*) to write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition; (*b*) to write a portion of an author to dictation; (*c*) to explain the grammatical construction of one or two sentences; (*d*) to point out the grammatical errors in a sentence ungrammatically composed, and to explain their nature; and (*e*) to give the derivation and definition of a few English words in common use; also (*f*) that a knowledge of at least two of following subjects be required:—English literature, history, modern geography."

Dr. ROLLESTON seconded the motion.

Sir W. GULL ridiculed the proposal and said it would be better to allow the regulations to remain as they stood.

Dr. A. WOOD said he believed the proposed legislation would only work mischief, and he proposed as an amendment: "That the examination in the English language be such as is now provided for in the 'Recommendations' of the Council, except that the last two lines of the footnote to p. 8 of the last edition of the 'Recommendations' be in future omitted."

Dr. HAUGHTON seconded the amendment, and objected to the introduction of literature and history, as subjects of too wide and vague a character for the preliminary examinations of the students.

Dr. ROLLESTON objected to the omission of literature, and dreaded lest medical men should not be able to hold their own with other classes of society. There were excellent text-books on literature which could be easily studied and mastered, and which would give the required information to the students.

Sir W. GULL supported Dr. Wood's amendment.

Mr. TEALE also supported the amendment.

Dr. HALDANE thought that an elementary knowledge of English literature, history, and geography should be compulsory. Ignorance on such subjects was absolutely disgraceful to the profession.

Sir JAMES PAGET said the Council was bound to make the best use of the improvements that had taken place of late years in general education. To say that more English should not now be required than was required fifteen or twenty years ago, seemed to him unreasonable. He thought

that the proposed change was desirable, supposing it to come in force two or three years hence. Of course the subject of literature would not take an unlimited range; a certain definite range could be prescribed, as in the case of many other subjects.

Mr. SIMON thought that instead of prescribing additional subjects, the examinations in existing subjects should be more complete. The student would almost necessarily take up the subjects of literature, history, and geography; and it was most desirable that he should do so; but he did not see his way to making the subjects compulsory. It would be an immense advantage if every student passed an examination in Shakspeare, but it could not be considered essential.

Mr. TURNER said he was greatly disappointed at a proposal being made and supported to allow things to remain as they were, notwithstanding the greatly improved means of education possessed by students at the present day. There was not, he supposed, a school in the country where history and geography were not taught, and he could not understand the objection to include those subjects in the preliminary education of medical students. The objection really meant that the Council was not to advance with the times, and the Council would be covered with ridicule if it gave effect to that view.

Sir W. GULL said the great error of the present day was the want of thoroughness. He repudiated the notion that he did not wish the Council to advance with the times, but he opposed Mr. Turner's proposal.

After some remarks from Dr. A. Wood,

Dr. ROLLESTON referred to the educational requirements of German medical students, and urged the necessity of insisting on literary culture for medical practitioners if they were not to occupy an inferior position in society.

Sir JAMES PAGET said that the College of Surgeons examined in two out of the three proposed subjects, and low as the examination was it had the effect of excluding two-fifths of the students. He thought that the Council was bound to do its best to encourage an enlargement of education in all the schools, and to work constantly with them.

Dr. PITMAN hoped that the present regulations would be amended. As far back as 1867 the Council had adopted the report of a Committee, which urged the necessity of literary and scientific education; and attention had recently been drawn to complaints that had been made by the licensing bodies with regard to the insufficiency of general education among the candidates presenting themselves. In the face of those facts he thought it strange that it should now be proposed to allow the present regulations to remain unaltered.

Mr. MACNAMARA pointed out that the subject of history would be difficult to deal with in Ireland, owing to the prevalence of sectarian prejudices.

Dr. BANKS thought that the subjects under consideration should be compulsory, and he did not regard as serious the objections stated by Mr. Macnamara.

Mr. TURNER said he was willing to modify his motion by requiring students to pass in two out of the three subjects.

Dr. A. WOOD objected to any change being made in the motion.

Dr. HUMPHRY said if Mr. Turner's proposal were adopted the examinations, which did not include the subjects in question, would not be accepted, and that would be a most serious result. He doubted the possibility of carrying out the proposal.

The amendment was then put; the votes were—for, 12; against, 8; majority, 4. On the amendment being put as a substantive motion,

Dr. HAUGHTON moved, as an amendment, that students should also be required to pass either in modern geography or English history. He was glad, he said, that the "misty bugbear" of English literature was removed out of the way. He agreed with Mr. Macnamara that many Irish students would decline to take up English history, but they would not object to geography.

Mr. MACNAMARA seconded the amendment.

Dr. WOOD pointed out that Dr. Haughton's proposal was not an amendment, and should be submitted as a distinct motion.

After some discussion on this point of order, Dr. Haughton's proposal was put as a substantive motion.

Dr. ROLLESTON proposed as an amendment that the student should have the option of passing in literature, history, or geography.

Mr. SIMON admitted the extreme value of the subjects in question, but would rather trust for them to the stimulus of social circumstances than to any compulsion.

Mr. TURNER thought that candidates should be specially encouraged to cultivate literature, and he therefore seconded Dr. Rolleston's proposal.

Dr. A. WOOD opposed the motion, and alluded to the numerous subjects required by the Council, asking it not to lay too heavy a burden upon the student.

Dr. HUMPHRY asked the Council to pause before adding fresh subjects of examination, which, he said, would be likely to lead to cramming and superficiality, which were the great defects of modern education. He did not think that the optional system was a good one, and would prefer that definite subjects should be prescribed. It should be remembered that at present examinations the rejections were very numerous. If more subjects were added the standard in the others would necessarily be lowered. He denied the utility of text-books on literature, which, he believed, would rather give a student a dislike to the subject, than prove an incentive to its study.

Mr. MACNAMARA hoped that Dr. Rolleston would not persist in his amendment.

Sir W. GULL ridiculed the notion of the Council discussing the question whether a medical student should be examined in such a subject as geography.

Sir JAMES PAGET asked in what way a student could be better tested than by ascertaining whether he had been able to learn the subjects that had been set before him at school.

Dr. QUAIN urged the importance of a good preliminary examination, and mentioned that at an examination at the College of Surgeons a student, when asked what was the principal event in the reign of King John, replied, "The ship *Magna Charta* was lost off the Wash."

The amendment was then put, and the numbers were—for, 10, against, 11. It was accordingly lost; and the original motion was put and carried.

Mr. TURNER then moved the adoption of the next subject: "One ancient Language—either Latin or Greek."

Dr. HAUGHTON said he had an important amendment to move to that resolution.

Mr. TURNER: What! Is there to be no ancient language?

Dr. HAUGHTON: No. I am going to ask the Council to follow out its resolution to its logical conclusions; and I shall propose: "That in the opinion of the Council the English language is the only language absolutely necessary for the Preliminary Arts Examination in Great Britain and Ireland." There must be no Greek sham, no Latin sham, no French sham, no German sham. You have opened up a dangerous precedent.

As the hour for adjournment had nearly arrived, it was resolved to postpone the debate on Preliminary Examination.

The Council then resumed; and on the motion of Dr. Quain, seconded by Mr. Simon, adopted the following financial report:—

The Finance Committee begs to report that the income of the General and Branch Councils for the year ending January 5th, 1880, has been £6881 17s. 9d., an amount which exceeds the income of the year 1879 by £175 4s. 2d. The expenditure during the year 1879 has been £5420 7s. 9d., which is less in amount than the expenditure of the preceding year by £902 7s. 7d. The Committee has therefore the satisfaction of reporting to the Council that, as the result of this increase of income and diminution of expenditure, the actual income has exceeded the expenditure by the sum of £961 10s. Of the tables annexed to this Report, Table (B) indicates the increase or decrease in the several items of expenditure which has taken place during the years 1877, 1878, 1879 respectively. Comparing the items of expenditure of the year 1879 with those of 1878, it will be seen, first, with reference to the items of increased expenditure, that they amount altogether to the sum of £381 4s. 1d., consisting of £23 10s., the cost of improvements in the printing of the Medical Register, and £92 2s. additional for house expenses, due chiefly to the cost of painting and decorating the Council-room. Comparing the items of decrease of expenditure during the years 1879 and 1878 respectively, it will be seen that the principal items of diminished expenditure are in the fees paid to members of the General Council—viz., £660 6s. 6d., and to the Executive Committee £144 19s. There is also a decrease in the cost of printing to the amount of £175 13s. 1d. It will be further noticed that there is a decrease in the items of law expenses, advertisements, &c., amounting to £151 2s. 6d. Table (C) shows the average income and expenditure of the General and Branch Council during the last seven years. It will be seen that the average excess of expenditure over income is £131. The same table shows, however, as already stated, that the income of the year exceeds the expenditure by the sum of £961 10s.

DENTAL FINANCE.—Reference must be made to table (D), which shows the receipts and expenditure of the Dental Registration Fund for the year ending January 5th, 1880. It will be seen that there remained then to the account of the Dental Fund a sum of £7253 17s. 8d. of New Three Per Cent. Stock, and of £3065 13s. 4d. in the Bank of England.

The treasurers have informed the Committee that of this latter sum £2000 has since been invested in the purchase of £2027 17s. 7d. New Three Per Cent. Stock. By request from the Committee, the Registrar has prepared the following approximate estimate of the probable future annual income and expenditure of the Dental Fund:—

ESTIMATED INCOME.	£	s.	d.
Dividends	274	0	0
Fees (at present rate)	250	0	0
Total income	524	0	0
Deficiency	755	0	0
	£1279	0	0

ESTIMATED EXPENDITURE.	£	s.	d.
Proportion of General Council's Fees	306	0	0
Fees for Executive and Dental Committees	105	0	0
Proportion of General Expenses	482	0	0
Printing	290	0	0
Law Expenses	16	0	0
Miscellaneous	80	0	0
	£1279	0	0

This table shows a probable future excess of expenditure over income of about £750, which, of course, must be met by drafts on the invested capital.

The Council then adjourned.

Monday, July 12th.

At the meeeting of the Council to-day,

Dr. HAUGHTON brought forward his amendment to Mr. Turner's motion on Saturday. He contended that the Council had nothing to do with the higher education of medical practitioners, and that a knowledge of Greek, Latin, French, or German was not necessary for the man who had to learn Chemistry, Physics, Medicine, Surgery, and Midwifery in such a way as to be a safe practitioner in the humble position to which he might be called. He therefore proposed, "That the English language is not absolutely necessary for the minimum preliminary examination." He did not know that Hippocrates spoke any other language than Greek, and he maintained that the only language absolutely necessary to the medical practitioner was that of the people among whom he practised. If Mr. Turner's motion were carried an injustice would be done to the students who were preparing themselves in Greek, which was largely taken up in Ireland. Of the 3218 students who went up for the intermediate examination in Ireland under the Act of last session 1209 went up in Greek, 2120 in Latin, 1602 in French, and 121 in German. Greek and Latin, he contended, ought to go together, and it would be a great hardship to students if Mr. Turner's proposal to dissociate them were adopted. If Greek were abandoned, Latin ought not to be retained. He denied that Latin formed any considerable part of the English language, although attempts had been made by Milton and others to latinise the tongue. The language of Swift, Fielding, Smollet, and John Bright, the language of the people, was connected not with Latin, but with the Romance languages and Anglo-Saxon. As to the writing of prescriptions in Latin, God forbid that he should degrade the language of Cicero and Horace by calling medical prescriptions Latin! How many medical men could parse a prescription? The whole thing was a mere hocus pocus, and an imposition upon the public—an attempt to hide from every one but the apothecary and the doctor what the unfortunate patient was taking.

Dr. HALDANE, in seconding the amendment, said that Latin, as taught to the majority of students, was of little or no good in the way of mental training; nor could it be said to be a language which would be of any great advantage to the ordinary medical practitioner in his professional career. At the final examinations what little Latin had been learned was often forgotten; for when the students were required to write a Latin prescription without contractions, the ignorance displayed in doing so was simply deplorable. The rank and file of medical men were not now expected to be classical scholars.

Dr. ROLLESTON cited the evidence given by Sir R. Christison before the Royal Commission, in which he stated that he knew no more admirable training for the youthful mind than the study of Greek and Latin. He protested against cutting away the common ground and culture that linked together all the learned professions.

Sir W. GULL said that it was not for the Council to lay down special subjects for preliminary examination, but to look to the school training of the day and simply demand such a test as would be prescribed by intelligent schoolmasters.

Dr. BANKS supported Mr. Turner's motion, and said he should deeply regret the omission of Latin from the preliminary examinations of medical students. Every boy in Ireland learned Greek and Latin at school.

The amendment was then put, and negatived, there being only three votes in its favour.

Mr. MACNAMARA then moved another amendment to Mr. Turner's motion, "That the present recommendations of the Council with regard to Greek, Latin, French, and German, do stand." He said that all students in Ireland learned Latin and Greek, and if neither of those languages was accepted instead of a modern language, great injustice would be done to those students.

It was ruled that the amendment was not then in order, and it was postponed.

Mr. Turner's motion in favour of "one ancient language" was adopted.

Mr. TURNER then moved, "That the candidate may select Latin or Greek, and that the examination shall include translation and grammar."

Dr. A. WOOD objected to giving the student an alternative. It would, he said, be a retrograde movement if Latin were not to be made imperative. It was the best mental trainer ever devised, and it would be a disgrace if it were not rendered compulsory. He should be ashamed to go home to Edinburgh and say that Latin was no longer regarded as a necessity to the medical student. He moved as an amendment that, as at present, there should be an examination in Latin, including composition and grammar.

Dr. STORRAR seconded the amendment.

Dr. ROLLESTON urged the importance of giving the widest scope to spontaneity, and supported Mr. Turner's proposal to give the student an option between Latin and Greek.

Mr. SIMON was also in favour of giving the student a choice between the two languages. The systematic study of any language was a good mental training, and the same might be said of the study of scientific subjects.

Dr. HUMPHRY was in favour of a more liberal view as to the basis of education, and therefore supported Mr. Turner's motion. The time would probably come when the Council would not be able to demand either Latin or Greek as compulsory.

Dr. QUAIN contended that Latin was an essential portion of medical education, and supported the amendment.

The amendment was then put, and the votes were—for, 11; against 11.

The PRESIDENT declared that, there being an equality of votes the amendment was not carried. On the names being taken down, however, it appeared that there were 12 for the amendment, and 11 against. It was accordingly declared carried.

MODERN LANGUAGES.

Mr. TURNER moved: "That an examination in one modern European language form part of the preliminary examination." He said that at present French and German were merely optional, but he thought the time had now come when one modern language should be regarded as an essential part of the preliminary examination. There could be no doubt that it was of great importance to enable a practitioner to become acquainted with what was going on in the science and practice of medicine in foreign countries. The report on the condition of the Scotch universities was very decided on this point. It had been suggested to him that if the principle were approved they should draw the limit at the two languages he had spoken of. At present no country in Europe was more actively engaged in scientific medical work than Italy. Dutch was also a very important language in its scientific aspects, and the option might be extended to that. The same thing might be said of the Scandinavian languages. The schools from which the students came usually taught French, and Dr. Haughton had showed that out of 3218 candidates in Ireland no fewer than 1602 were willing to present themselves for examination in French. The experience at the University of Edinburgh was that whilst very few went in for German yet most of those who did passed.

The motion was seconded by Dr. Banks.

Dr. HAUGHTON said the difficulty he found in voting for the motion was that he conceived the Council was drifting into a possibility of conflict with the higher educational bodies. No one could accuse the University of Dublin of a desire to lower the standard, for with the single exception of Oxford they were the only university in the United Kingdom that required a degree in arts as a preliminary to a degree in medicine, and that degree in arts was only granted after four years' study. But while they had 1200 students in arts on their books not more than 300 of those were

students in medicine. They did not believe in a medical curriculum in arts. Therefore, if the Council came to a decision to require as a compulsory thing a modern language from a medical student, it would clash with the present regulations which had been considered and carefully revised several times during the last ten years, and which made Latin and Greek compulsory and modern languages optional. It would place the University in the unpleasant position of being practically called upon to alter their whole curriculum for all their students, or, on the other hand, if they still continued to follow out their own idea of arts culture, they might run the risk of their students ceasing to register. For these reasons he should vote against the motion.

Mr. TURNER said none of his propositions were intended at all to interfere with that portion of the recommendations of the Council which provided that a degree in Arts of any university in the United Kingdom or the colonies should be considered a sufficient test of preliminary education.

Dr. HUMPHRY moved as an amendment that Greek, French, and German be optional subjects, as at present. He considered that Mr. Turner's motion would practically exclude Greek, for if Latin and one modern language were made compulsory it would be almost impossible that students should take up Greek. The Council had to a certain extent gone out of its way to demand a preliminary examination, and no doubt had done well in doing so. The educational bodies had responded to the wish of the Council, and had modified their requirements accordingly; but if the Council put a strain upon them and demanded a foreign language, he could quite understand that they might be disinclined to respond to it.

Dr. A. WOOD seconded the amendment. If another compulsory subject were added to the curriculum he would much prefer that it should be mechanical philosophy.

Dr. PETTIGREW thought if an additional compulsory subject were introduced it should be Elementary Mechanics of Solids and Fluids, without which no step could be taken in physiology or anatomy.

Sir W. GULL said it would be a serious thing if after a parent had spent a small fortune on a boy in a public school where modern languages were held in contempt he should be rejected by the Medical Council because he did not know a little French.

Mr. HALDANE suggested that the Council had better first settle what subjects were to be compulsory, and then go on to the optional subjects.

This suggestion was approved of, and the amendment was withdrawn.

The motion was put and lost, five only voting for it.

MATHEMATICS.

Mr. TURNER moved, "That an examination in the Elements of Mechanics form a necessary part of the preliminary examination."

The motion was seconded by Dr. FERGUS, and agreed to.

On the motion of Mr. Turner it was also agreed that it should include Arithmetic, including vulgar and decimal fractions.

Mr. TURNER moved, "That Algebra, including simple equations, should also be included."

Mr. SIMON regarded simple equations as not worth having, and recommended that the algebra should extend to quadratic equations.

Sir JAMES PAGET agreed with Mr. Simon in his opinion as to the uselessness of simple equations; but as he had never in his profession found it necessary to use algebra, he thought if mechanics were added algebra had better be left out altogether.

Dr. ROLLESTON moved, and Dr. FERGUS seconded, "That quadratic equations be added."

Dr. ANDREW WOOD said they could not get quadratic equations.

Dr. HUMPHRY said the preliminary examination was already very extensive. By adding to it they would not improve general education, but would lead to more and more cram, and more superficiality.

The amendment, to include quadratic equation, was put to the Council, and rejected.

The Council then adjourned.

Tuesday, July 13th.

At the meeting of the Council to-day,

Dr. ROLLESTON asked the President whether any communication or reference had been made to him by the Government on the subject of the Vaccination Bill. He said there could be no doubt that there would be an increase of mortality if there were any relaxation of the Vaccination laws. He was about to speak further on the subject, when

The PRESIDENT interposed, and said that it was out of order for a member to make a speech when asking a question.

The PRESIDENT said, as far as he knew, no communication had been made to him by the Government on the subject of the Vaccination Bill. A copy of the Bill had been sent to him by the President of the Royal Society, and addressed to him as President of the Medical Council; but on what ground it was sent, or whether in pursuance of instructions from the Government, he did not know.

The Council then went into committee for the consideration of the adjourned motion on preliminary examination.

Mr. Turner's motion, "That the examination in mathematics include algebra and simple equations," was put and carried.

Mr. TURNER moved that the examination in geometry include the first three books of Euclid or the subjects thereof.

Dr. ROLLESTON moved, as an amendment, the addition of Euclid, book iv. prop. 1—9.

Dr. HAUGHTON said it was absurd to stop short at proposition 9; the 10th proposition being, he said, the gem of the whole book.

Dr. ROLLESTON said he was willing to include the whole of the 14th Book, and would alter his amendment accordingly.

Dr. HUMPHRY opposed the introduction of the additional subjects, and said that the great examining bodies of the country only required the first two books of Euclid.

Sir JAMES PAGET also spoke against the addition, and said it would be difficult to compel all the bodies to conform to the wishes of the Council. If any additional subjects were prescribed, they should be such as would have a direct utility in regard to the study of medicine. It would be absurd to reject a student who came from Canada, for instance, simply because he had only been examined in two books of Euclid instead of four.

Mr. MACNAMARA objected to overloading the curriculum, and preferred a stricter examination in a more limited set of subjects.

Dr. BANKS said that the Queen's University recommended two books only, and he agreed in that recommendation.

Dr. PETTIGREW also opposed an overloading of the preliminary curriculum.

After some further observations from members of the Council, Dr. Rolleston's amendment was put and negatived.

Dr. HUMPHRY proposed another amendment, to the effect that two books of Euclid only, as at present, be required; and this was carried by a large majority.

Mr. TURNER said that taking stock of what had been done, he was afraid it would be best represented with a round O; for with the exception of two trifling alterations, they remained just as they were at the beginning of the discussion. They had recommended an examination either in English history or modern geography, and had struck out an objectionable foot-note to the effect that in the English examination a sufficient grammatical knowledge of the English language was all that was required. He regretted that the Council had not seen its way to add something to the requirements of the preliminary examination. Judging from the spirit which had been manifested by the Council, he feared that the motion he was about to make with regard to the elementary mechanics of solids and fluids might be rejected. Last year, however, a resolution on the subject had been passed by the Council, and the only reason why it had not been confirmed was that the Executive Committee found that there were certain technical difficulties in the way. All he asked of the Council at present was its sanction to the general proposition that the elementary mechanics of solids and fluids should form part of the preliminary examination. There might, however, be some difficulty in forcing the subject into the preliminary examination, because there were so many schools in which it was not taught; and he would therefore add to his resolution:—"It being understood that the examination in this branch may be passed either as preliminary, or before, or at the first professional examination."

Dr. HAUGHTON, in seconding the motion, said the subject included in it was absolutely necessary for the furniture of a student's mind. So great was the ignorance on the subject on the part of army officers in India, that

some of them did not know the difference between a barometer and a thermometer.

Dr. PETTIGREW approved of the introduction of the subject, but thought that it should be rendered compulsory before the commencement of the medical curriculum, and he moved an amendment to that effect.

Dr. A. SMITH expressed a similar view, and seconded the amendment. He said he did not think there would be any difficulty in the acquisition of sufficient knowledge of the subject. He believed that the educating bodies would fall in with the requirements of the Council in reference to a subject of so much importance.

Dr. ROLLESTON also moved an amendment giving the student the option of taking the elementary mechanics of solids and fluids; qualitative chemistry, with practical work; botany, geology, or the elements of logic.

Sir W. GULL seconded Dr. Rolleston's amendment.

Mr. SIMON said he would take his stand upon the resolution of the Council last year that the subject of elementary mechanics of solids and fluids should be recommended as one of the subjects "without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered." Local officers of health were taken from the rank and file of the profession; and how could they advise the local authorities on matters of ventilation, drainage, and the like, unless they possessed some knowledge of the subject in question? The period at which the knowledge was acquired was a matter of comparative indifference so long as it was regarded as compulsory before the giving of a registrable qualification.

Dr. A. WOOD hoped that the Council would not go back from its previous resolution.

After some further discussion Dr. Rolleston withdrew his amendment.

Dr. SCOTT ORR spoke in favour of Dr. Pettigrew's amendment, that the subject be made a compulsory part of the preliminary examination.

Dr. A. SMITH also urged the importance of making the subject part of the early training of the student.

Mr. TURNER suggested that his motion should be divided into two parts, and that a vote should first be taken on the simple question that there should be an examination in the elementary mechanics of solids and fluids, making the period at which it was taken the subject of a distinct motion. This course was agreed to, and the question was unanimously decided in the affirmative.

Sir W. GULL ridiculed the idea of the Council going over the same ground as last year, and said they appeared to be constantly deciding the same thing over and over again, and always congratulating themselves on their success.

Dr. Pettigrew's amendment was then put and negatived, and Mr. Turner's motion as to the period of the examination was carried by a large majority.

Mr. TURNER then moved: "That the examination in the Elementary Mechanics of Solids and Fluids comprise statics, hydrostatics, and dynamics," which, after a short conversation, was agreed to.

This concluded the discussion on compulsory subjects.

Dr. FERGUS then brought forward a motion relating to the optional subjects. He said he had been accustomed to regard the Council as a body which aimed at elevating the education of the profession, but he was now afraid that they had been leveling down instead of up. They ought to have increased the stringency and breadth of the examinations. More than one-third of the candidates who came up to the first professional examination were rejected. Such a state of things ought not to exist. The preliminary examination should be such as would weed out the incompetent, and therefore should be greatly extended. Instead of that the Council had for the last few days been bringing the examination down to the level of boys fresh from school. It had been said that in the interest of the practitioner it should be made as easy as possible, but if any man entered the profession merely as a trade for a morsel of bread and cheese and silver he would be the most miserable being in the world. His object should be the performance of duty. The Council should not try how rapidly they could manufacture doctors, but in every way to elevate them. He moved: "That one of the following optional subjects must be passed as preliminary—namely, French, German, Greek, Logic, Moral Philosophy, Botany, Chemistry, Zoology, Geology."

Dr. ROLLESTON seconded the motion.

Mr. SIMON said he was not quite clear that even one optional subject was necessary, but he thought a distinction might very properly be drawn according to whether or not the examination in the elements of mechanics had been passed as a part of the preliminary. He was disposed to think that if a candidate practically said, "My educational circumstances have not allowed me to learn elementary mechanics in time for the preliminary examination," an optional subject should be required. In that way he would hold out an inducement to the students to pass the examination in elementary mechanics as a preliminary, and if they did so they should be excused from all the optional subjects.

Dr. HAUGHTON thought chemistry should be excluded from the list. The Council would have a very mean opinion of what chemistry was if they considered the wretched schoolboy knowledge as sufficient. A few years ago, when intermediate examinations for Ireland were started, meetings of all the schoolmasters in the country were held, and the overwhelming majority were of opinion that the amount of chemistry that could be acquired at school was not worth possessing. Any one who had experience in teaching higher chemistry knew that when a schoolboy came to learn it the first process he had to undergo was to unlearn all that he had previously learned of so-called chemistry. Contrary to the advice of the Irish schoolmasters chemistry was kept on last year by the Intermediate Education Commissioners, who thought, like the Council, that they were a great deal wiser than those who had practical knowledge of the subject. The result was that the highest prizes at the examinations in chemistry were taken by men who had never seen an experiment in their lives, and who had obtained all their knowledge from books.

After some discussion, it was agreed to postpone the question of whether one or two of the subjects should be required until the subjects themselves had been decided upon.

French, German, and Greek were agreed to.

On the suggestion of Mr. TURNER, Italian and Dutch were added to the list.

Logic was also agreed to.

On the proposal to include Moral Philosophy,

Dr. HAUGHTON said this was a subject which required a mature mind, and he thought it would be a misfortune to send forth into the profession a crowd of pert prats who fancied they understood it. He would not give sixpence for all the knowledge of moral philosophy which a schoolboy could possess.

On being put to the vote, the proposal was negatived.

Botany was agreed to.

With regard to the proposal to include Chemistry,

Mr. TURNER said he should like to know what was meant by putting it as an optional subject in the preliminary examination. Was it intended by doing so to exclude chemistry from forming a necessary part of the professional examination? If that was so, he should most strongly protest against it. It was perfectly clear that such a knowledge of chemistry as was necessary for the requirements of the profession in regard to physiology, pathology, materia medica, and therapeutics could not be tested by any examination that could be imposed upon a student in the course of his preliminary. He would be sorry if the Council adopted any resolution which would lead the licensing bodies or the students to believe that, if acquired, a certain minimum of chemistry for the preliminary examination that would absolve them not merely for further examination in the subject, but also for attendance on a systematic course of lectures and instruction.

Dr. PITMAN drew attention to the fact that there were no less than ten optional subjects proposed, and the preliminary examining boards must be prepared to meet the requirements of every candidate. That was a very serious matter, and the Council would do well to limit the number of its subjects.

Mr. TEALE said what was intended was that the door should be opened for a student to select an examining board which was prepared to test him in his special subject.

Dr. HUMPHRY agreed with Mr. Teale's view. With regard to the examination in chemistry, he thought there was nothing that would prepare a man for his future studies in medicine better than a rudimentary knowledge of chemistry. He did not set so low an estimate as Dr. Haughton did on the knowledge of the subject which could be obtained from books. He remembered that on one occasion at Cambridge a man attained a very high position in chemistry, though it was well known that he had received no practical instruction in it. Of course it could not be a perfect knowledge, and

he would not think of substituting the preliminary for the professional examination in chemistry.

Dr. WOOD considered it a most heretical doctrine to lay down that anyone could learn chemistry from a book, and if it was allowed to be scamped at first the students would not devote themselves to a serious study of it in after life.

Dr. ROLLESTON regarded chemistry as the very alphabet of natural science, and thought it should be recognised in the preliminary examinations.

Dr. SMITH said all that Dr. Fergus meant by the proposal was the merest elementary chemistry, and it was most desirable to introduce that into the preliminary examination.

Dr. STORRAR said there were a great number of schools in which chemistry was taught in the laboratory, and he was in favour of including it among the optional subjects.

Elementary Chemistry was then agreed to, but Elementary Zoology and Elementary Geology were negatived.

Mr. SIMON suggested that a higher qualification in one of the compulsory subjects should be regarded as a substitute for a smattering in one of the optional subjects.

Dr. FERGUS said he had at first intended to include higher mathematics, and was quite prepared to propose it now.

Dr. HAUGHTON seconded the motion, which was lost.

A short discussion followed upon the question whether one or two of the optional subjects should be required. It was ultimately resolved that only one should be regarded as necessary.

Mr. SIMON moved as a rider to the resolution: "Provided that if the candidate have passed his examination in the Elementary Mechanics of Solids and Fluids he shall be excused for the examination on the optional subject."

Dr. HUMPHRY seconded the motion, which was negatived.

The Council then resumed. The Registrar read the whole of the resolutions passed in Committee, and Mr. Turner moved their adoption.

The Council then adjourned.

Wednesday, July 14th.

The Council reassembled under the presidency of Dr. Acland.

Mr. TURNER asked the President if he could furnish the Council with information why the Naval Medical Department had ceased to furnish a statement of the results of the examinations for admission to the Medical Department of the Navy; also if the returns from the Army Medical Department include the candidates for commission in the Medical Department of the Indian Army.

The PRESIDENT replied that there had been some delay in obtaining the desired information, and he was unable to give a complete answer. He had reason, however, to believe, from communications he had had with both Departments, that there would be no difficulty in obtaining the information.

Dr. HAUGHTON said that the subject was under the notice of Parliament, and it was important that the information asked for should be communicated.

The PRESIDENT said that as soon as it was received it should be communicated to the Council.

Mr. SIMON called attention to an answer given by the President on Tuesday with reference to the transmission to him of a copy of the Vaccination Bill by the President of the Royal Society, and he said he assumed that document was sent by Mr. Spottiswoode in his private capacity, and not officially. He said he had himself received a copy of the Bill from Mr. Spottiswoode.

The PRESIDENT stated that the document had been sent to him on Royal Society paper, and was addressed to him as President of the Medical Council. In former years there had been considerable inconvenience from their seeming to be compelled to receive communications on all sorts of subjects, and he had acted in the cautious way described, not knowing whether the communication in question was to be considered as official.

The debate on Mr. Turner's motion for the adoption of the resolutions passed by the Council with regard to preliminary examination was resumed.

The following resolutions were adopted without discussion:—(1) "That an examination in English form part of the preliminary examination." (2) "That the examination in the English language be such as is now provided for in the 'Recommendations' of the Council, except that the last two lines of the footnote to p. 8 of the last edition of the 'Recommendations' be in future omitted."

On the motion (3) "That No. 2 of clause 4 of the 'Recommendations' be as follows: either English History or Modern Geography," Dr. QUAIN suggested the substitution of the word "and" for "or," and contended that the two subjects could not well be separated. Mr. Turner adopted the suggestion, and the motion was altered accordingly, and agreed to.

The following resolutions were adopted without discussion:—(4) "That an examination in one Ancient Language form a part of the preliminary examination." (5) "That Latin, including Translation from the original and Grammar, be the Ancient Language which is to be rendered compulsory." (6) "That an examination in the Elements of Mathematics form a necessary part of the preliminary examination." (7) "That the examination in Mathematics comprise: (*a*) Arithmetic, including Vulgar and Decimal Fractions." (8) "That the examination in Mathematics comprise: (*b*) Algebra, including Simple Equations." (9) "That the examination in Geometry comprise, as at present: (*c*) Geometry, the first two books of Euclid or the subjects thereof." (10) "That there be an examination in the Elementary Mechanics of Solids and Fluids." (11) "That it be understood that the examination in the Elementary Mechanics of Solids and Fluids may be passed either as preliminary, or before, or at the first professional examination, so that the passing of this examination is not to be regarded as necessary for registration." (12) "That the examination in the Elementary Mechanics of Solids and Fluids comprise the Elements of Statics, Dynamics, and Hydrostatics."

Mr. TURNER proposed the adoption of the next resolution:—(13) "That the following be the optional subjects: Greek, French, German, Italian, Dutch, Logic, Botany, Elementary Chemistry."

Greek, French, German, and Italian were adopted as optional subjects without discussion.

Dr. ROLLESTON opposed the introduction of Dutch—a language which, he said, was of very little value in the way of mental training.

Sir JAMES PAGET thought if Italian were to be taken as an optional subject, Dutch should also be included. There was a great deal of good scientific literature in that language.

Dr. HAUGHTON suggested that, instead of Dutch, "any one modern language" should be accepted.

Mr. TURNER accepted the suggestion.

Sir WM. GULL asked the Council not to make itself ridiculous. He believed that all the work of the last few days had been a mistake. The question discussed should have been referred to a committee of gentlemen who were well acquainted with the education of boys up to sixteen or seventeen. With regard to the proposal to examine in Dutch, he thought they might as well propose to examine in the patois spoken in the Channel Islands or in Sanscrit.

Dr. PETTIGREW said, if a student presented himself for examination in Dutch, and there was no examiner to be found, the examining body would be in a serious fix.

Dr. A. WOOD said the Council would be adopting a ludicrous course if it assented to the proposal, and he strongly opposed it.

After some further discussion, the proposal for the adoption of "any one modern language" was agreed to.

Logic, Botany, and Elementary Chemistry were also agreed to as optional subjects.

Dr. HAUGHTON moved the addition of zoology (which he thought ought not to be separated from botany) to the optional subjects.

Dr. BANKS seconded the motion, and said that zoology was taught in all the national schools in Ireland.

The motion was negatived.

It was then resolved, "That one of the foregoing optional subjects be made compulsory."

On the motion of Mr. TURNER, seconded by Sir JAMES PAGET, the following resolution was agreed to:—"That the General Council's amended Recommendations on education and examination be communicated to the several examining boards, whose examinations are recognised by the Council, that their attention be drawn to the changes which have been made; that they be informed that the Council proposes that the additional requirements be not made obligatory on students until Jan. 1st, 1882; and that on and

after that date no person be allowed to be registered as a medical student unless he shall have previously passed a preliminary examination in the subjects of general education as specified in the following list" (the list agreed to during the present session).

Mr. SIMON proposed: "That, in the opinion of the Council, it is desirable that intending candidates for the medical profession should, before they enter on the purely medical curriculum, have been instructed and examined in the rudiments of natural science—physical, chemical, and biological, and that, in proportion as this can be done, the present medical curriculum and present professional examinations should be lightened of all such matters." He said there was no reform on which competent persons were more entirely agreed than the necessity of their getting, if possible, a preliminary scientific examination; it would be a most important assistance to the progress of medical education in this country.

Dr. FERGUS seconded the motion.

Mr. TURNER said he was entirely at one with Mr. Simon as to the importance of having an examination in the natural sciences as a part of the general training required from students of medicine, and that the examination on these subjects should, of course, take place before the examination in subjects more directly bearing on medical training. He should like, however, to have some further information as to what Mr. Simon meant by the "rudiments of natural science"; was it intended to place this examination on the same level as the elements of chemistry and botany which they were willing to accept as optional subjects, or was it to be something further, and to be taken after registration?

Mr. SIMON said he had endeavoured to avoid unnecessary detail. The Council was not a regulating body, but a recommendatory one, and they would be troubling themselves needlessly by going minutely into detail provided the principle was properly stated. The examination should be after the preliminary general examination, and before commencing the distinctively medical curriculum, or at the latest before the end of the first year. It should, in his opinion, embrace an elementary knowledge of mechanics, solids, and fluids, of heat, weight, and electricity, of general chemistry, and of the constitution of plants and animals.

Sir JAMES PAGET was satisfied that no conclusion could be arrived at on this subject during this session of the Council, and, therefore, if Mr. Simon's motion was adopted it must be on the understanding that it should not come before the Council, but should be referred to a committee.

Sir WILLIAM GULL, in supporting the motion, said the result would be that more time must be occupied in the study of the profession than was the case at present. It was quite impossible to educate a man so that he should be fit to enter on the practice of his profession at the age of twenty-one. It could not be done, and, therefore, they ought to ask that a man should be twenty-three at least, and perhaps twenty-four, before he was entitled to practise. In making this inquiry they certainly must take in the whole question of professional time.

Dr. HAUGHTON said the practice of the University of Dublin was precisely in accordance with the proposal of Dr. Simon, the Arts curriculum and the medical teaching occupying together six years. He did not object to the resolution, but it must involve an additional time of study after registration before commencing practice.

Dr. ANDREW WOOD said this was a very important subject, and one well deserving the consideration of the Council, but he might put it to Mr. Simon, whether on this the penultimate day of the session the Council was in a condition to enter upon the consideration of this matter. He had made out a very good case for a Committee, and no doubt a Committee over which Mr. Simon presided would be able to lay before the Council a most valuable report. It would be a most important subject to bring before the next session of the Council.

The motion was then put to the Council, and agreed to.

Mr. SIMON, after expressing his gratification at seeing the principle of his resolution so entirely approved by the Council, moved: "That this resolution be referred to a Committee of seven, with instructions to propose to the Council before the close of the present session the draft of a communication to be addressed to the licensing authorities with a view to giving it practical effect." He did not propose anything like a Committee of investigation, but simply a Committee to draw up a letter to be sent to the licensing bodies.

Dr. FERGUS seconded the motion.

Mr. TURNER thought there would be some difficulty in getting a satisfactory communication drafted and approved by the Council this session, as it would no doubt involve some discussion.

Mr. MACNAMARA suggested the omission of the words, "to giving it practical effect," and substituting "of getting their opinion thereon." That would not pledge the Council to anything, and would enable the licensing bodies to forward by the next meeting of the Council a report that would be very valuable for the discussion of the subject.

Dr. HALDANE, although entirely agreeing with the principle involved in Mr. Simon's resolution, would not vote for it, because it involved so complete a change in medical education. This was a point of very great importance, and the Council should not take action in the matter without consulting the various licensing bodies. He therefore proposed as an amendment: "That the Council having agreed to the preceding resolution, a copy of this resolution be sent to each of the licensing bodies, with a request that they will at an early date express their opinion on the subject."

Dr. ANDREW WOOD seconded the amendment.

Sir JAMES PAGET said if the amendment was carried it would really defer all possible progress until the beginning of next session. He urged the formation of the Committee, whereby the whole information might be collected and placed before the next meeting of the Council.

Mr. SIMON, in order to meet objections, asked leave to withdraw his motion and to substitute the following: "That the resolution be communicated to the licensing authorities under the Medical Act, and that it be recommended to those authorities to consider whether they can separately or conjointly take steps to promote the establishment of a preliminary scientific examination, and to require of candidates for their respective licences that after passing the preliminary examination in general education, and either before commencing the purely medical curriculum or at latest before the end of the first year thereof, shall pass such preliminary scientific examination as is proposed."

After some further discussion Dr. Haldane's amendment was put in the following form: "That a Committee be appointed to communicate on the subject with the licensing bodies, and to report to the Council at its next meeting." This was agreed to.

On its being put as a substantive motion,

Mr. MACNAMARA moved as an amendment: "That this resolution be referred to a Committee of seven, with instructions to propose to the Council before the close of the present session the draft of a communication to be addressed to the licensing authorities, with a view of getting their opinion thereon."

Mr. SIMON seconded the amendment, which on being put to the Council was negatived by a majority of 10 to 9.

The motion as proposed by Dr. Haldane was then put and agreed to.

The Committee was appointed, comprising Dr. Storrar, Dr. Rolleston, Dr. Hudson, Mr. Turner, and Dr. Haldane, with power to add to their number.

Mr. SIMON then moved the following resolution: "That in Section 3 of Chapter 1 of the Council's Recommendations on Education and Examination the list of bodies from which testimonials of proficiency in preliminary general education may, in the opinion of the Council, be properly accepted by the licensing authorities under the Medical Act, be amended by omission of its Part II—this amendment to take effect on and from the 1st of January next; and that notice be forthwith given to each licensing authority that after the end of the present year the examinations mentioned in Part II. of the aforesaid list will not be regarded by this Council as satisfactory for the purposes of the Medical Act." He was proceeding in his address to the Council in support of the motion when the time for closing the discussion arrived, and the debate was adjourned.

An application for registration by Mr. Nathaniel Chappell, referred to the General Council by the Executive Committee, was refused.

The Council then adjourned.

Thursday, July 15th.

The Council was occupied during the early part of to-day's sitting with Dental business. A motion was passed to the effect that the bodies conferring licences in Dental Surgery be requested to furnish yearly a statement of the nature of

the examinations, and the number of candidates, showing the numbers passed and rejected. Certain letters received from the British Dental Association, and other persons, with reference to Dental Registration, were referred to the Dental Committee. A motion to the effect that the opinions of counsel on Dental Registration should be read was adopted; but strangers were requested to withdraw, and the Council deliberated on the subject for some time in private. The later hours of the sitting were devoted to the further consideration of Mr. Simon's motion, proposed on Wednesday, with reference to testimonials of proficiency in preliminary general education. After a lengthened discussion, at the suggestion of Dr. Storrar, who seconded the motion, the motion was withdrawn, and the Council adjourned to Friday.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

New and Old Swindon.—New Swindon is the town created by the Great Western Railway Company in the vicinity of the station on its line so well known to travellers. Old Swindon is the neighbouring town, and the original Swindon from which the railway station and the new town took their name. Last year both towns suffered from a severe outbreak of scarlet fever, and the Local Government Board directed their inspector, Dr. Blaxall, to make inquiry as to the circumstances of the outbreak, and generally as to the sanitary condition of the two towns. The report of this inquiry has now been made public. It describes of both towns that common-place condition of things which is now so frequently found in small towns, and which we must look to another generation fully to remedy. Both towns have not hesitated to spend money on sewerage; and New Swindon is supplied wholly, Old Swindon partly, with fair water from the works of a Company. But the sewerage is incompletely carried out in several important respects. Old Swindon has still recourse too largely to shallow wells; and in both towns that continuous sanitary supervision and care, without which the best arrangements for sewerage and water-supply must largely fail of their object, are conspicuously wanting. Both towns carefully store their excrement in privies adjacent to the houses; and both hold the medical elements of their sanitary work properly provided for by appointing medical officers of health, one each, at a salary of £10 a year—New Swindon having a population of 16,000, and Old Swindon of 4250! Dr. Blaxall's recommendations indicate that the ordinary sanitary administration of both places is generally neglected, and that in respect to infectious diseases there is no serious hope of checking them until the administration is much amended.

Castleford Registration District.—An unusual prevalence of scarlet fever and enteric fever in this district led the Local Government Board, early in the year, to cause a medical inspection of it to be made by Dr. H. F. Parsons. His report of the results of this inspection is now before us. The district contains four principal centres of population, Castleford, Whitwood, Methley, and Glass Houghton, and the report instructively illustrates the slowness with which sanitary work makes progress among semi-rural communities. Castleford has been the subject of repeated official inquiries regarding its sanitary condition, nevertheless, after the expenditure of much money, and notwithstanding the aid of extraneous skilled advice, Dr. Parsons describes much that is defective in the sanitary administration and state of the town. This, it appears, is not to be attributed to parsimony, but to the failure of the Sanitary Authority "to apprehend and apply the ascertained principles of sanitary science to the suppression in details of the particular nuisances which have characterised the district from the time of Mr. Babbage's inquiry [for the General Board of Health] in 1850 to the present time." An instructive illustration of the wasteful inaptitude of the sanitary authority in carrying out its work is given in an account of their attempt to introduce a pail system of excrement disposal, and the frustration of the attempt by their way of going about it. Whitwood and Methley (Glass Houghton being included in the district administered for sanitary purposes by the Pontefract Rural Sanitary Authority) have the common characteristics of West Riding communities, which depend on shallow wells for water-supply, on the old-fashioned open midden privy for the deposit of excrement, and on surface drains for drainage. Whitwood has begun to sewer, and so far gives promise of amendment; Methley stands at ease, so to speak, in her filth. Scarlet fever and enteric fever are endemic in the registration district, and the mortality among infants from diarrhœa there is "excessively" high. A much higher standard of sanitary administration will have to be reached before reasonable hope of holding in check scarlet fever or removing the conditions fostering enteric fever can be entertained. Dr. Parsons terminates his report by a long list of recommendations to the several sanitary authorities in the district—recommendations which pretty well cover all the things they were appointed to do, and have not done.

SMALL-POX IN DUBLIN.

The Public Health Committee of the Corporation of Dublin have recently issued a report on the prevalence of small-pox in that city. They refer to the neglect of the Guardians in not putting into force the powers conferred on them by the Vaccination Act, and recommend that vaccination should be made compulsory. They believe that there is much force in the suggestion that temporary houses should be provided for families in which infectious disease has occurred, pending the disinfection of their dwellings, and that observation wards and a convalescent home should be established. Further, that the governors of the Cork-street Fever Hospital be requested to help in establishing a hospital for the treatment of small-pox patients and a convalescent home in connexion with their hospital; the Corporation to contribute to the erection and maintenance of such an institution. We may add that during the June quarter 125 deaths were registered in Dublin from small-pox, being an increase of 64 as compared with the first three months of the present year.

THE PUBLIC HEALTH (IRELAND) ACT (1878) AMENDMENT BILL.

A Bill has been introduced into the House of Commons by Mr. Redmond and others to amend the Public Health (Ireland) Act, 1878. This Bill provides that notwithstanding anything contained in that Act the Local Government Board may, on the application of the urban sanitary authority of any urban district, vary, amend, or enlarge any existing provisional order, notwithstanding that such provisional order was obtained previous to the passing of the Public Health (Ireland) Act, 1878.

THE "FEVER" IN MAYO.

Mr. W. E. Forster laid upon the table of the House of Commons on the 12th inst. a report received from Dr. Nixon, who had been sent to the fever-stricken districts of Mayo to report on their condition. Notwithstanding the warnings given several months ago with regard to the probable appearance of fever sooner or later among the populations of these districts, it is to be gathered from the report that they had been unheeded, and that the guardians were quite unprepared to deal with the outbreak. The sanitary condition of the infected districts is described as deplorable. From other sources we learn that both maculated typhus and relapsing fever exist there.

In answer to a question from Mr. Hastings, the President of the Local Government Board stated in the House of Commons on the 12th inst. that some further time must elapse before his department would be able to commence the issue of vaccine lymph from the calf. He observed that as the department would be held responsible for the quality of the lymph, great care was necessary in maturing the plans for its cultivation and issue.

The vestry of St. Mary Abbott's, Kensington, as sanitary authority for that important district of the metropolis, have prepared a petition for presentation to Parliament against the Vaccination Acts Amendment Bill. The petition has been published in the form of a circular prefaced by an abstract from a report on the subject by Dr. Dudfield, their medical officer of health.

Mr. J. A. Forrest, the Chairman of the Scavenging Sub-committee of the Liverpool Corporation, has prepared a report on the final disposal of those products of the scavenging operations of that city which possess no value to the farmer. It would seem that in Liverpool part of these materials is used in raising the level of new streets and in covering marsh lands along the line of the Lincolnshire canal, and part has been carried out to sea in a barge constructed for the purpose and sunk there. It proves that the carriage of these refuse matters out to sea is the most economical method of disposal, and the Corporation is to be asked to sanction the construction of one or more additional barges.

The question of a district medical officer ordering out-door relief was considered at a recent meeting of the Medway Board of Guardians, one of the general inspectors of the Local Government Board being present. It seems strange that a question of this sort should arise, seeing how clearly the Orders of the Central Authority set forth the respective duties of the medical officer and relieving officer; and it causes a suspicion that the Poor Law Authorities are not sufficiently careful in making medical officers, when first appointed, acquainted with the rules which should govern the performance of their duties.

The members who represented St. George's, Hanover-square, on the deputation from metropolitan vestries and Boards of Guardians to Mr. Dodson, on the Vaccination Amendment Bill, reported the result of their interview with that gentleman to the meeting of their Board on the 7th instant, and the Board passed the following resolution:—"That this Board regret the introduction of the Bill limiting the penalties for refusing to have children vaccinated, and would gladly see the compulsory powers increased by giving the Guardians power to enforce the Act."

The Eccles and Barton Local Board, it is reported, have had to request their medical officer of health to refrain from introducing political controversy into his reports. In a recent report, it appears, this gentleman had offered some observations on the free-trade policy of the country, he, seemingly, being a staunch protectionist; and in so doing he had given offence to the Board.

The recent heavy downfalls of rain have caused overflows from the sewers and flooding of basements in several parts of the metropolis. The evil seems to have been most markedly experienced in Limehouse, along the line of the low level main-sewer. Deputations from the several districts which have suffered have had interviews with the Metropolitan Board of Works on the subject.

A story is current in the press of a sewer-man at Chester having narrowly escaped suffocation in the mud of a blocked sewer. When will the local authorities of our ancient cities learn that it is a disgrace to lag behind the time in matters of sewerage, and that even the antiquity of a place does not justify the retention of arrangements for the disposal of filth which are pernicious to the inhabitants?

Scarlet fever, which has been prevalent at New Brompton, is now reported to have disappeared from the locality.

VITAL STATISTICS.

HEALTH OF LARGE ENGLISH TOWNS.

THE rate of mortality in our large English towns continues unusually low. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5072 births and 2760 deaths were registered last week. The births were 113, and the deaths as many as 515, below the average weekly numbers during 1879. The deaths showed an increase of 38 upon the number returned in the preceding week, and were equal to an annual rate of 19·2 per 1000, against 18·9 in each of the previous three weeks. During the thirteen weeks which ended on the 3rd inst. the death-rate in these towns averaged but 20·4 per 1000, against 23·3, 22·7, and 22·2 in the corresponding periods of the three years 1877–78–79. The lowest death-rates in the twenty towns last week were 10·1 in Hull, 13·2 in Birmingham, 14·6 in Brighton, 14·7 in Bristol, and 15·6 in Portsmouth. The rates in the other towns ranged upwards to 21·4 in Manchester, 23·7 in Salford, 24·1 in Sunderland, 25·3 in Liverpool, 28·9 in Oldham, and 29·8 in the city of Norwich. The comparatively high rates in these last-mentioned towns, with the exception of Manchester, were due to excessive zymotic fatality.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had risen from 406 to 476 in the four previous weeks, further rose in the week ending Saturday last to 522; these included 183 from diarrhœa, 130 from scarlet fever, 81 from measles, and 74 from whooping-cough. The annual death-rate from these seven diseases averaged 3·6 per 1000 in the twenty towns; it was but 1·4 in Wolverhampton and 1·9 in Brighton, whereas it ranged upwards to 5·9 and 7·3 in Salford and Norwich. Scarlet fever showed the largest proportional fatality in Norwich, Sheffield, Sunderland, and Salford; measles in Leicester, Oldham, and Sunderland; and whooping-cough in Norwich, Liverpool, and Bradford. Small-pox caused four deaths in London and one in Birmingham, but not one in any of the eighteen other large towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which in the two preceding weeks had been 237 and 216, further declined to 191 on Saturday last; 17 new cases of small-pox were admitted to these hospitals during last week, against 50, 47, and 38 in the three preceding weeks. The number of patients in the Highgate Small-pox Hospital was 10, against 11 and 10 in the two previous weeks.

The deaths referred to diseases of the respiratory organs in London, which had been 176 and 177 in the two preceding weeks, were 171 last week, and corresponded with the corrected weekly average; 99 deaths were referred to bronchitis and 51 to pneumonia. The annual death-rate from diseases of this class did not exceed 2·4 in London, whereas the rate from the same diseases was equal to 3·5 in Liverpool, and 4·5 in Salford.

HEALTH OF LARGE SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a quarter persons, the annual death-rate last week averaged 20·4 per 1000, against 20·6, 20·5, and 20·9 in the three preceding weeks; it exceeded, however, by 1·2, or 6 per cent., the average rate in the twenty large English towns. The rates in the eight Scotch towns ranged from 13·3 and 14·6 in Leith and Aberdeen, to 23·4 and 25·6 in Perth and Paisley. The deaths referred to the seven principal zymotic diseases in the eight towns were 97 last week, and included 36 from diarrhœa, 20 from whooping-cough, 15 from scarlet fever, 9 from measles, and 9 from fever. The annual death-rate from the seven diseases averaged 3·9 per 1000 in the eight towns, and in the twenty English towns it was 3·6; this zymotic rate corresponded with the average of the three preceding weeks, and while it was but 1·0 in Aberdeen and 2·3 in Dundee, it ranged upwards to 5·3 and 5·8 in Paisley and Perth respectively. The 9 deaths from fever showed a decline from the recent increasing weekly numbers, and included 5 in Glasgow. The mortality last week from measles decreased, whereas that from scarlet fever showed a marked excess. The 36 deaths from diarrhœa exceeded by 11 those returned in the previous week, and included 19 in Glasgow, 6 in Dundee, and 4 in Edinburgh. A fatal case of small-pox was returned last week in Glasgow, the first from this disease in any of the Scotch towns since the week ending 3rd April last. The deaths from acute diseases of the respiratory organs (bronchitis, pneumonia, and pleurisy) in the eight towns, which had been 79 and 91 in the preceding weeks, were 90 last week, and were equal to an annual rate of 3·6 per 1000; the rate from the same diseases in London last week did not exceed 2·4 per 1000. As has been noticed in recent weeks, the excess of mortality in the Scotch towns compared with the English appears to be mainly due to the excessive mortality from lung diseases and to zymotic fatality.

THE HEALTH OF DUBLIN.

The annual rate of mortality in the city of Dublin, which had been 32·7 and 33·7 in the two preceding weeks, declined last week to 31·2, the lowest rate recorded in any week since the beginning of April. The annual rate of mortality in Dublin during the thirteen weeks on the 3rd inst., without any correction for defective registration, averaged no less than 36·6. In London, during the same period, the death-rate averaged but 19·4 per 1000. The 188 deaths in Dublin last week included 47, or 25 per cent., which were referred to the seven principal zymotic diseases, against 48 and 53 in the two preceding weeks; 12 resulted from scarlet fever, 10 from small-pox, 9 from whooping-cough, and 9 from

fever. The annual death-rate from these seven diseases was equal to 7·8 per 1000 in Dublin, against 3·6 in London, and 3·4 in Edinburgh. The fatal cases of small-pox, which were 19 and 14 in the two preceding weeks, further declined to 10 in the week ending Saturday last.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

FAMINE AND DEARTH.

Although under the term of the "Irish distress" (and careful avoidance of the word "famine" with reference to Ireland), we have sought to veil from ourselves, after a fashion, the actual suffering from scarcity of food in the distressed districts in the sister island, there can be no doubt that we have been and are dealing there with famine in a sufficiently painful, although not in its most painful, form. We may congratulate ourselves, at least, on having been able to stave off that awful extremity of famine which has existed for several months, and still unhappily exists, in parts of Asia Minor. The scarcity observed in Ireland is but one of many manifestations of scarcity which have occurred, or are now occurring, over vast tracts of territory in Europe, Asia Minor, and in Central Asia. The state of the southern and eastern provinces of Russia in respect to food is such as to awaken the profoundest anxiety. There is little doubt that in not a few localities the scarcity is such that the peasantry must be suffering actual famine, and the prospect for the coming winter is of the darkest. The food supplies kept in store were so largely exhausted by the sufferings of the past winter that in not a few districts the seed corn was consumed, and large tracts of ground were unsown. Moreover, such crops as were sown, and which during the spring gave promise of abundant harvest, have been now very largely destroyed by an invasion of locusts and other insects. The local governments are in despair in face of this dreadful plague of insects. Hands fail to deal effectually with it. Migrations during the dearth of winter partly depopulated some districts, and in others the superstitious feelings of the peasantry have proved an effectual impediment to their rendering help to save themselves from the impending scarcity. "It is the will of God," they say, and it is questionable whether even the interference of the Church will serve to remove their apathy. Rye, which forms the staple food of the peasant and lower orders, and which in June, 1875, sold in St. Petersburg at 6 roubles 40 c. the 8 pouds, 32 lb., had risen to 11 roubles and 50 c. for the same quantity in June, 1880. It is probable that we shall never know accurately the details of the dreadful famine which prevailed over a great part of Central Asia during the last winter and spring, and which there is reason to believe annihilated several tribes. The famine which still prevails over a large part of Asia Minor, of Kurdistan, and of Turkish Arabia, has become better known to us through numerous correspondents in the daily press, and the reports from the various missionary stations in the distressed districts. The famine in European Turkey appears to have attracted less attention, but, nevertheless, it would seem that the population of the districts visited by the late war are suffering from extreme destitution, and in some of them the people are dying from actual famine.

THE OUTBREAK OF FEVER IN SWINFORD UNION.

Dr. Grimshaw, Registrar-General for Ireland, has recently gone through the records for the Swinford district for the past ten years, and has analysed minutely those for the last year and the first half of the present. During the ten years he finds that fever has prevailed there—in fact, is endemic—and that there is, therefore, nothing remarkable about its presence this time more than at any other. Beginning with 1870, in that year there were 24 deaths from fever, in the next 25, in the next 22, in the next 38, in the next 33, in the next 13, in the next 18, in the next 16, in the next 36, and last year there were 48 deaths. In the first half of the present year there were altogether 22 deaths from fever, while in the first half of last year there were 23, so that this half year there has been one death less than in the corresponding period of last half. In the second quarter of this year there have been 8 deaths from fever in the whole of the Swinford Union, which contains a population of 53,000. For the first half of this year the deaths from all causes in Swinford Union has been 508, while in the corresponding period of last year it was 585, or a decrease of 77. The most fatal epidemic disease during the last year has been whooping-cough, which has proved very destructive. The average death-rate of the Union has been only 14·8 per 1000 for the ten years, and the average death-rate per annum for the second quarter during the ten years has been 12·5, while for the second quarter this year it was 18·8, which is probably below the average for the whole of Ireland. So far as can be ascertained, these outbreaks of fever are quite common among the people of Ireland. For example, there has been on outbreak on the Kilkerran Islands, another in Skibbereen, another in Donegal, besides others at places where there has been no exceptional distress at all.

THE "HOWARD MEDAL."

It is announced that five essays have been received by the Council of the Statistical Society in competition for the "Howard Medal" of the present year, the subject being "The Oriental Plague." It is further announced that the subject for the Howard Medal for 1881 is "Jail Fever, from the earliest Black Assize to the last recorded outbreak in modern times."

The municipality of Paris have decided to establish (as a beginning) three ambulances, to be distributed in various parts of the city, for the removal to hospital of persons suffering from infectious sickness, hitherto the ordinary public carriages having been used for the purpose. Much importance is now being attributed in Paris to the introduction of infection by travellers in reference to recent outbreaks of disease there. It is stated that the later prevalences of small-pox have all begun in furnished apartments, and these and hotels are to be subjected to special supervision in view of infectious diseases.

The Sanitary Institute of Great Britain held its anniversary meeting in the Royal Institution on the 8th inst. The Earl of Shaftesbury, K.G., presided, and distributed the medals and certificates awarded for useful sanitary inventions and appliances exhibited at Croydon last year; and Captain Douglas Galton, R.E., C.B., read a paper on "Some Preventible Causes of Impurity in London Air." In the evening the members of the institute dined together at the St. James's Hall Restaurant, Dr. B. W. Richardson in the chair.

We learn that the reports as to the prevalence of small-pox in Norway are much exaggerated. To the 8th inst. the total number of cases which had occurred amounted to 120, of which 89 had taken place in Christiania. Of these cases 7 (all young unvaccinated children) had proved fatal.

Recent reports from Russia state that diphtheria is raging among the working classes of the government of Saratov; but that the disease is declining in the government of Catherinoslav.

INTERNATIONAL MEDICAL CONGRESS.

AT the meeting of the Committee of Organisation, held on Tuesday last, the list of sections and officers subjoined was finally decided upon. The Congress will meet from the 3rd to the 9th of August, 1881, in rooms granted by the University of London and the Royal and other learned Societies meeting in Burlington House. Invitations to attend the meetings will be issued to all legally qualified medical practitioners in the United Kingdom, and will be sent to the different countries of Europe, to America, the Colonies, and India. Papers may be read in English, French, or German, and will be published in the volume of Transactions in the language in which they are read. We presume it is only an oversight that the word "male" is omitted from the qualifications of those to whom invitations are to be sent. The names of many of the officers of the sections are an assurance that the "lady-doctors" will not be asked to attend and contribute; but if by any want of clearness in issuing the invitations mistake should occur, a very considerable proportion of the leading members of the profession will, of course, decline to co-operate. The point should be determined at once.

It will be necessary for all who wish to make communica-

tions to the Congress to intimate their intentions to the secretary before the end of March, 1881.

All communications respecting the Congress should be addressed to William MacCormac, Esq., Hon. Secretary-General, 13, Harley-street, London, W.

The following is the list of officers :—

President of the Congress. — Sir James Paget, Bart., LL.D., D.C.L., F.R.S.

Vice-Presidents of the Congress.—President of Royal College of Physicians, London ; Presidents of Royal Colleges of Surgeons of England, Ireland, and Edinburgh ; President of Royal College of Physicians of Edinburgh, and of the King and Queen's College of Physicians, and Faculty of Physicians and Surgeons, Glasgow ; Master of Society of Apothecaries, London, Governor of Apothecaries' Hall, Ireland ; Professor Acland ; Sir George Burrows, Bart. ; G. Busk, Esq. ; Dr. W. B. Carpenter ; Sir Robert Christison, Bart. ; Luther Holden, Esq. ; Sir J. Hooker ; Dr. Hudson ;- Professor Huxley ; Sir W. Jenner, Bart. ; Thomas Keith, Esq. ; Professor Lister ; Robert MacDonnell, Esq. ; Professor Owen ; Professor George Paget ; Professor Burdon Sanderson ; Professor Spence ; Professor Allen Thomson ; Sir Thomas Watson, Bart. ; Spencer Wells, Esq.

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Section III., PATHOLOGY AND MORBID ANATOMY. — *President :* Dr. Samuel Wilks, F.R.S. *Vice-Presidents :* Dr. John Syer Bristowe ; Jonathan Hutchinson, Esq.; Professor Sanders, M.D., F.R.S.E., Edinburgh. *Secretaries:* Dr. J. F. Payne ; Marcus Beck, Esq., M.S.

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Reception Committee : Prescott Hewett, Esq., *Chairman ;* Sir Trevor Lawrence, Bart., M.P. ; Sir Henry Thompson ; Dr. Farquharson, M.P. ; Dr. Lyons, M.P. ; J. H. Puleston, Esq., M.P. ; Dr. A. Vintras ; Dr. Lionel Beale ; Dr. Andrew Clark ; Dr. Philip Frank ; J. Cooper Foster, Esq. ; Ernest Hart, Esq. ; Dr. George Johnston ; John Marshall, Esq. ; Dr. W. O. Priestley ; Dr. Owen Rees. *Secretaries :* Dr. Samuel West ; Dr. Seymour Sharkey.

Executive Committee. — Dr. Risdon Bennett, LL.D., F.R.S., Pres. Roy. Coll. Phys., London, Chairman ; Sir W. Jenner, Bart., M.D., K.C.B., D.C.L., F.R.S. ; Sir James Paget, Bart., LL.D., D.C.L., F.R.S. ; Sir William Gull, M.D., F.R.S. ; Luther Holden Esq. ; Professor J. Lister, D.C.L., F.R.S. ; Dr. H. A. Pitman ; W. Bowman, Esq., F.R.S. ; Dr. Sieveking ; Dr. Herman Weber ; Jonathan Hutchinson, Esq., Dr. J. Matthews Duncan, LL.D., F.R.S. ; Prescott Hewett, Esq., F.R.S. ; Dr. Andrew Clark ; A. O. Mackellar, Esq. ; Dr. A. B. Shepherd, Dr. P. H. Pye-Smith, W. MacCormac, Esq.

Correspondence.

"Audi alteram partem."

ON THE EXCISION OF OBSTRUCTION AT THE NECK OF THE BLADDER.

To the Editor of THE LANCET.

SIR,—Will you kindly permit me, through the columns of your magazine, to give publicity to the few comments I wish to make upon the subject of Dr. Mercier's operation of excision of prostatic valvules, to which, I think—for brevity's sake, if for no other reason—the name of "Prostatectomy" should be given, while, for the same reason, "Prostatotomy" may be applied to incision of the valvules. I now broach this question on account of the appearance of a letter by Mr. G. Buckston Browne in THE LANCET of June 5th, 1880, p. 896.

Mr. Browne begins his communication by challenging Mr. Teevan's statements concerning Mercier's operation ; but as Mr. Teevan is well able to make good all his utterances, I shall leave him to fight his own battle, feeling confident that he will be victorious, for I am sure he is right in all that he has said about Dr. Mercier and prostatectomy. Dr. Mercier, however, does not know English ; he is an aged man, needing rest of mind and body ; and besides, he is now at his country-house to recruit his shattered health, and may not be aware of the present attack upon his good name and fame.

It is as a friend and disciple of Dr. Mercier, and as a lover of fair-play, that I write to refute the statements of Mr. Browne regarding prostatectomy. It seems to me that Mr. Browne has been hasty in condemning this operation, as it does not appear in his letter that he has the warrant of actual experience and observation for his denunciation ; on the contrary, he acknowledges that the operation has never been performed in England. His views and objections are therefore purely theoretical, and must fall before Mercier's facts. If Mr. Browne will for several years carefully study the four volumes pertinent to the subject written by Dr. Mercier, make numerous trials of prostatotomy and prostatectomy upon the cadaver, and then perform these operations upon the living, and wait at least a year for the final result, he may possibly come to the point of advocating them as strongly as I do ; if not, then it is to be hoped that he will propose some-

thing better, but until that time his condemnation should go for nothing. I do not think it fair to say, of a gentleman of Mr. Teevan's erudition, that he does not "appear to have consulted the chief English literature" of the subject upon which he has lectured so well. I believe Mr. Teevan to be thoroughly familiar with all the literature—good, bad, and indifferent—of the subjects which he treats, otherwise he never would have been appointed Lettsomian Lecturer by the learned body which has the power of conferring that honour.

The statement that the "operation is rarely if ever employed by more than one surgeon in Paris, and that many years ago, and now abandoned there," is not correct. It has been performed by other surgeons in Paris within a few years, and has never been abandoned, at least by Dr. Mercier. It has been very badly done by some surgeons, who, not understanding it, never should have undertaken it. *They* have abandoned it, and wisely too. All those who refuse to study the operation as it should be studied will either execute it badly or refuse to perform it. In bad hands it is worse than useless; in good hands it is eminently successful. Mr. Teevan has doubtless looked carefully into all the facts connected with prostatectomy, and deserves to be thanked for calling the attention of a learned Society to so important a subject, about which one-third of mankind after the age of fifty is so deeply concerned.

To the best of my knowledge and belief I declare that Dr. Mercier has performed his operation on upwards of four hundred patients. Hæmorrhage has been more frequent and abundant in incision than in excision, but has never been fatal. He considers it as merely a bugbear; consequently the Italian method is unnecessary. In a prostatectomy followed by prostatotomy (the excision and incision giving a depth of two centimetres) performed by me a week ago the patient lost half an ounce of blood, and the urine was tinged with blood for two days only. He sat up half of the day following the operation, and was up and dressed every day thereafter. He has not had a bad symptom. I may say the same of another patient sixty-seven years of age—operated upon two months ago—who sat up in bed in a few days and was up and dressed in a week. My oldest patient was seventy-six, was operated upon nearly two years ago, and is now in fair health and better of his urinary trouble than he had been for several years before.

The operation which I performed a week ago was done with an improved instrument, a modification which I made of Mercier's first excisor. I have within a few days ordered a new prostatectome, whose male blade will be much more easily opened to seize the valvule than Mercier's present excisor, and with which one centimetre of the depth of the valvule can at once be removed.

I have several new cases under preparation for prostatectomy, and see no reason why I should not continue to perform the operation. After my results have become generally known, this operation will, I think, make great progress in America. May it thrive in England, and may Mr. Browne be the first in Great Britain to say of it, in the language of Chaussier and Percy when they reported upon lithotrity, that it is "equally glorious to French surgery, honourable to its author, and consoling to humanity."

I am, Sir, very respectfully yours,

JOHN W. S. GOULEY, M.D.,

Professor of diseases of the genito-urinary system in the Medical Department of the University of the City of New York, Surgeon to Bellevue Hospital, &c.

New York, June 22nd, 1880.

TEACHING AND EXAMINATIONS IN THE UNIVERSITY OF EDINBURGH.

To the Editor of THE LANCET.

SIR,—In the course of a pleading in favour of the one-portal system, you have given publicity to statements regarding the teaching of, and examining in practice of, physic in the University which are quite erroneous, and I shall be obliged if you will insert this letter, and give the same publicity to the contradiction as you have accorded to the assertion.

I have never objected to any question put by an assessor in any examination, and the area of examination has never been restricted. I cannot imagine the possibility of my objecting to any question put by such examiners as those with whom I have been associated—Dr. Dyce Duckworth of St. Bartholomew's Hospital, and Dr. Duffin of King's College—with both of whom I have enjoyed the most complete accord, and for whose depth of knowledge and precision in examining I have the highest admiration.

As to my course of lectures, I beg to refer you to the University Calendar, p. 82, from which I extract the following paragraph:—"It is intended that each course shall be, so far as possible, complete; but that while the general principles (included in Part 1) shall be fully discussed each session, the diseases of individual systems (included in Part 2) shall be taken up in different order year by year, and certain systems selected for more minute consideraton."

It must be obvious to any one acquainted with what you justly call the "great theme" of practice of physic that no one can at the present day give a satisfactory course in a single winter session. I am personally of opinion that the Universities, and even the General Medical Council, should require two courses on such a subject. But considering that in the meantime only one course is required, I have uniformly striven to condense as much as possible, and each session include some account, at least, of the diseases of each physiological system. I venture to think that the course which you have selected for criticism would be found, on inquiry, one of the most complete delivered anywhere in a single session.—I have the honour to be, Sir,

Your obedient servant,

July 12th, 1880. T. GRAINGER STEWART.

*** We gladly insert Dr. Grainger Stewart's letter. Taken in connexion with Dr. Duckworth's letter and others which we publish, it makes it pretty clear that if the Edinburgh University student is not prepared for his examinations in the Practice of Medicine, it is not the fault of his teachers or their modes of teaching. If Dr. Stewart will read our remarks over again, he will see that while giving publicity to the "notion" of our correspondent as having possibly some basis in truth and raising one or two interesting questions, we expressed our belief that he was in actual error in his main suggestion, that an assessor in examinations was hindered in his choice of subjects by the professor. The case is very much as we surmised. Dr. Stewart's exposition of the Practice of Medicine in its completeness can only be got by a student attending two courses. Further proof that Dr. Stewart does not merely repeat himself is found in the large classes of students who attend two courses of his lectures, though only required to attend one. We agree with Dr. Stewart that it is scarcely possible in a single winter session to cover the wide field of practice of physic. But we think that the professor should not only overtake in each session the diseases "of each physiological system," but should emphasise the common and serious diseases of each chief organ, even if at the expense of some incompleteness of detail and system.—ED. L.

To the Editor of THE LANCET.

SIR,—Under the heading of "Teaching and Examinations in the University of Edinburgh," you make a statement which I feel it incumbent upon me immediately to correct. You there say "an assessor in the University of Edinburgh, examining in the practice of physic, put a very proper and straightforward question, which was objected to by the examining professor on the ground that the subject had not been discussed by him in the course of lectures which the student had attended."

Being the assessor referred to, I beg emphatically to deny that any restriction was placed on the subject-matter at my disposal. It was from the first clearly understood that the range of my examinations was not to be in any way limited by the group of subjects which Professor Grainger Stewart had touched upon during the preceding winter. Far from that, Professor Stewart expressly desired me to examine upon any and every subject that might legitimately be included as "practice of physic." "The men are presumed to have prepared these subjects, whether they have heard them lectured upon or not." Professor Stewart never even gave me a list of the subjects that had formed part of his

previous winter course, and I am at this moment ignorant of what his curriculum comprised. As a matter of fact, I drew my questions from the whole range of the practice of physic, and was extremely gratified at the good "all round" standard of excellence they elicited.

I am, Sir, your obedient servant,

ALFRED B. DUFFIN, M.D.,
Physician to King's College Hospital.

King's College, London, July 12th, 1880.

To the Editor of THE LANCET.

SIR,—I read with regret your remarks on "Teaching and Examinations in the University of Edinburgh," and as first senior medallist of the class of Practice of Physic, I have been asked to represent the class; and so I beg of you that you will do the Professor of the Practice of Physic the justice of publishing the following:—

The whole range of medicine cannot possibly be satisfactorily discussed in a hundred lectures of one hour each, but one set of systems is fully treated of in alternate sessions—the remaining systems not being neglected, but so dealt with as actually to give the student the most important points, and guide him to the rest. Consequently in no session is any system left untouched; and if one of the systems receiving a minor share of attention in any year happens to be the respiratory system, certainly such a disease as pneumonia would in any case be fully studied. In point of fact, I have attended the class of Professor Grainger Stewart during the past two sessions, and, after comparing the notes taken during these courses, I can state definitely and precisely that your fears of a necessarily imperfect education of the Edinburgh University medical student are entirely groundless. At the opening days of the session Professor Stewart distinctly told us that in the systematic course he would not be able to go over the whole subject with us, but said what he would do, and recommended the text-books necessary to get up the rest. Moreover, the Professor in his clinical lectures and bedside teachings constantly endeavours to illustrate more fully the imperfectly treated subjects; and since every student must attend the clinical lectures, and most students attend his cliniques in the Infirmary at least one session, I am decidedly of opinion that if any student be imperfectly educated the shortcomings are not from the side of Professor Grainger Stewart.

I am, Sir, yours obediently,

Edinburgh, July 13th, 1880. ANDERSON STUART.

To the Editor of THE LANCET.

SIR,—In your issue of the 10th inst. I find attention called to the conduct of the Examinations in Practice of Physic at Edinburgh.

Inasmuch as the alleged circumstances in your paragraph must refer either to Dr. Duffin, of King's College Hospital, or to myself, I am constrained, for my part, to offer the most unqualified denial to them.

After holding office for five years as a University Examiner, in association both with the late and the present Professors, I am free to state that I have no recollection of having been interfered with on any occasion in the course of my duties. I acted in the most strict and impartial spirit, all the candidates being strangers to me, and I certainly covered the whole field of subjects.

Not knowing the members of the Professor's class from those who had attended the lectures of other teachers, I could, of course, make no distinction in framing my questions; and, I may add, that I was equally ignorant of the particular subjects developed, or less fully treated of, by the Professor in his previous prelections.

So far as I am concerned, I am content to give a simple denial to your correspondent's assertions, leaving it to those who must, in this matter, have most knowledge—the numerous body of gentlemen whom I had the honour to examine, and to those who know me best to give me credit, or the reverse, for fairness and independence as an examiner.

Looking back upon my term of office, I may state that I could no more conceive of such interference, as alleged on the part of the Professor, than I could contemplate my own subserviency in paying any heed to it.

I am, Sir, your obedient servant,

DYCE DUCKWORTH.

Grafton-street, Piccadilly, July 12th, 1880.

HOSPITAL STATISTICS OF ALCOHOLIC STIMULATION.

To the Editor of THE LANCET.

SIR,—Nearly twenty years ago I came to the conclusion that a careful analysis of the wine, spirit, and malt liquor roll of every hospital in the kingdom, with reference to the average daily quantities administered to each patient, would be a very important and valuable contribution to hospital statistics, if set forth in such a way as to show the limits of variation depending upon the practice of individuals in medical, surgical, fever wards, &c., over determinate periods, as, e.g., from month to month, from year to year, &c. In a volume entitled "Clinical Medicine," published in 1862, I submitted a statement of this kind bearing on my own practice for five years in the Royal Infirmary of Edinburgh; and in relation to fever, similar returns were afterwards published in even greater detail by myself and by Dr. Russell, indicating in daily averages the amount of alcoholic stimulants used by each patient in our respective fever wards in the treatment of typhus. These returns were not without an effect on medical opinion; but their usefulness would have been greatly increased had the method indicated in them been generally followed. And now that you are again directing attention to the subject, I would take the opportunity of urging that in every public hospital such returns should be regularly submitted, and an analysis of them published in the annual reports. The rough aggregates usually given as representing the practice of individual hospitals are of comparatively small value. If some one having authority would promulgate a blank schedule with the particulars required, it might be adopted, after due consideration, by every hospital in the kingdom without further delay.

I remain, Sir, yours truly,

Glasgow, July 13th, 1880. W. T. GAIRDNER.

"ARMY MEDICAL REPORT FOR 1878."

To the Editor of THE LANCET.

SIR,—My attention has just been called to a passage in the review of the Army Medical Report for 1878 in your issue of the 10th inst., in which you comment on the absence of any contribution from the medical division of this hospital. Will you permit me to say that I am not responsible for the omission. A very interesting, and, as it appeared to me, instructive report, was drawn up for the Blue Book at my request by Dr. Veale, Assistant Professor of Military Medicine in the Army Medical School, on the causes of fever under treatment in this hospital from Cyprus, Malta, and Gibraltar.

The interest of this report, to my mind, consisted in the fact that it established on a sure scientific basis the specific difference between the fevers of Cyprus and those of Malta and Gibraltar. This report was forwarded, through the usual official channel, to the authorities for publication. The executive medical officers of the medical division of this hospital are in no way responsible for its non-appearance.

I am, Sir, faithfully yours,

N. C. MACLEAN, M.D.,
Professor of Military Medicine, Army Medical School.

Royal Victoria Hospital, Netley,
July 13th, 1880.

THE VACCINATION ACTS.

To the Editor of THE LANCET.

SIR,—As a general practitioner, I think, with you, there is much to be said for the Legislature limiting the multiplicity of fines of parents for not having their children vaccinated. I object to make fools and fanatics into martyrs by fines and imprisonments, and to have the greatest discovery of medicine and the pure benevolence of the profession disparaged and misrepresented in the process. For my part, I should object to vaccinate a child brought to me by Dr. Brewer's policeman, and not by its parents. The limited fines will sufficiently indicate law and duty and civilisation. They will suffice to secure the vaccination of all children whose parents are not incurable fools, and, with all respect to Mr. Carlyle, these are not so very large a proportion of

the human race. The unlimited fines do no more than this, and they do great harm by creating agitation and sympathy, for which there will be no room under the amended Act.

The medical profession has acted with pure benevolence and unselfishness in this matter. It has nothing to gain but credit, not even money, from neglected or despised vaccination. Small-pox is a disease on which good-sizeable medical bills may be founded, very different from the paltry fees got for vaccination.

I am by no means, however, disposed to let the fools and fanatics off too easily. I would suggest that under the new Act fines for exposure of small-pox should be increased, and that medical men be empowered to charge double fees for attending a disease so disgusting and so preventable. Only yesterday a strange servant-girl walked into my house, covered with small-pox pustules, after being at a chemist's, and perhaps another medical man's. This is surely a great nuisance, against which the profession has a right to claim some protection. To have one's servants and children recklessly and needlessly exposed to so preventable a disease, is a grievance of which we have a right to complain. In other words, if the non-vaccination fine is to be mitigated, for which I think there is much to be said, I maintain that those who deliberately court small-pox should be regarded as having cultivated personal liberty in a most selfish and offensive way, and should be made to pay for it, in the general reprobation of sensible people, in severe isolation, and in heavy medical taxes. It is reasonable, too, in this connexion, to consider the propriety of a law requiring revaccination. I have, you will see, more faith in law and less in fines than some of my medical brethren. Medical men will, in the course of time, be better appreciated for their strong and unselfish advocacy of vaccination, and the disease of small-pox will come to be rightly regarded as at once a crime, a disgrace, and a punishment.—I am, Sir, your obedient servant,

July 12th, 1880. A GENERAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—Readers of the *Echo* on Thursday and Friday evenings of last week must have been somewhat surprised to see that a petition had been presented from the British Medical Association, signed by 2000 medical men, "against vaccination." The facts of the case are, that I had the honour of presenting a petition from the Committee of Council of the British Medical Association against the "Vaccination Acts Amendment Bill"; that this having been incorrectly described by the *Echo*, the Editor of that paper has ignored my twice repeated request to make that explanation which I am now glad to have the opportunity of laying before your readers.

Faithfully yours,

July 14th, 1880. R. FARQUHARSON.

H.M. PRISON, COLDBATH-FIELDS.

To the Editor of THE LANCET.

SIR,—You have been grossly misinformed as to the mortality in this prison; the fact being that only two deaths have occurred from January 31st to this date—namely, one from acute pneumonia on the 24th of June and a case of suicide by strangulation on the 25th of June, our daily average number of prisoners being about 1500.

I am, Sir, faithfully yours,

July 12th, 1880. W. SMILES, M.D., Surgeon.

*** We are pleased to receive Dr. Smiles's correction with regard to the general health and mortality among the prisoners at the Coldbath-Fields Prison. Still it does not affect the question at issue, which is, that since the introduction of the new dietary scale there have been three deaths, *all among short-termed prisoners*, on whom the new scale presses with undue severity. The death of the prisoner Nolan, we have always maintained, was never satisfactorily explained. And the circumstances attending the two recent deaths mentioned by Dr. Smiles require to be more fully detailed before the public conscience can be satisfied that the fatal issue in both cases was not hastened, if not actually induced, by the depression caused by the severity of the dietary.—ED. L.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons on Friday, the 9th inst., a petition from the British Medical Association was presented against the Government Bill for the Abolition of Multiple Penalties for Non-vaccination. Curiously enough, this petition was reported in an evening paper as "against vaccination." Other petitions against the Bill were presented from London, Leeds, and Manchester.—The twenty-ninth Report of the Inspectors of Lunatic Asylums in Ireland was presented.—A short discussion took place on the appointment of the Select Committee on Contagious Diseases Acts. Mr. Childers urged, in reply to objectors, that there was still time to get through one branch of the subject, in continuation of the labours of the previous Committee, and promised to consider some suggested additions to the number of the Committee. The Government nomination was then agreed to, as follows:—Mr. Cavendish Bentinck, Mr. Stansfeld, Colonel Alexander, Sir Harcourt Johnstone, Viscount Crichton, Mr. Burt, Mr. O'Shaughnessy, Mr. Osborne Morgan, Mr. Brassey, Mr. Cobbold, General Burnaby, Sir Henry Wolff, Mr. Ernest Noel, Colonel Digby, and Mr. William Fowler.

On Monday Mr. Dodson replied to Mr. Cowen that the regulations for the prevention of the overcrowding of canal boats rested with the local authorities to carry out, and no representation had been made that increased powers were necessary. There was considerable difficulty in dealing with the occupants of gipsy tents and other movable dwellings, but the Local Government Board would endeavour to deal with them, in the way of sanitary regulations, at a favourable opportunity.—Mr. Hastings inquired when the National Vaccine Establishment would begin to supply calf vaccine. Mr. Dodson was sorry he was unable to give a definite answer. The Local Government Board were making inquiries to ascertain what would be the best arrangement in order to secure an adequate and constant supply; but inasmuch as the Department would be answerable for the quality of the lymph the greatest care was required, and therefore, with every desire to push the matter on as rapidly as possible, he was afraid some further time must elapse before they would be in a position to commence the requisite supply. Sir H. D. Wolff put a series of questions as to the shipping of lunatics to England by the Indian military authorities, and referred to two cases in which such persons had been quartered on the rates at Portsmouth. Mr. Childers said the soldier's wife and the boy referred to in the question were taken to the union, as alleged, but stoppages were made on the highest scale from the pay of the husband and the father respectively towards their maintenance. It was not within his province to say whether the Indian authorities were justified in sending them home, but in the case of the boy, who had been in an asylum in India, the medical officer there reported that the climate was dangerous to him. He had asked the Secretary for India to make inquiry in the matter. Sir H. D. Wolff gave notice that he would ask for the correspondence relating to cases of Indian lunatics landed at the port of London. Mr. Forster, in reply to questions from the Irish members, promised to lay on the table a report from Dr. Nixon, a temporary medical inspector who had been sent into the fever districts. Fever prevailed chiefly in the union of Swinford, and although some additional cases had been reported within the last few days, he had reason to believe that the disease was on the decline. The last return from Swinford stated that there were 96 fever patients in the infirmary. The vice-guardians advertised for a second doctor, but no one answered the advertisement. They had now, however, succeeded in obtaining the services of one from Dublin, and also one or two trained nurses, and an ambulance. The sanitary condition of the places where the fever most prevailed was deplorable, and when the fever once got a hold it was very difficult to check it. The difficulty was much increased by the fear which the people had of infectious disease, and their unwillingness to acknowledge its existence in their houses. Mr. O'Connor Power inquired whether the right honourable gentleman had given any special instructions with a view to improving the sanitary arrangements of which he complained. Mr. Forster was sorry to say that he referred mainly to the condition of the cabins; and these defects were not very easily removed. The guardians were doing what they could, but it was not an easy matter to assuage the condition of a large

population. The overcrowded and bad condition of the cabins made the fever spread very rapidly. Mr. Parnell said it appeared there was an entire want of preparation for the outbreak of fever at Swinford. Were steps being taken to be in readiness in other unions? Mr. Forster replied that the Local Government Board were taking steps. Boards of guardians had been requested to provide ambulances. Something must be left to local government, and it was hoped the guardians would do their duty, as in a great many cases they were doing. What had happened at Swinford was likely to be a warning to other boards.

On Tuesday, in reply to Mr. Elliot, Mr. Peel stated that in August, 1879, the ambulance classes established under the auspices of the Order of St. John of Jerusalem were transferred to certain divisional surgeons of the metropolitan police, who voluntary undertook the duty of instruction. More classes would be held in October next, and all necessary facilities would be given. The course of instruction embraced the treatment of persons in a state of insensibility, casualties in the streets, and other practical matters connected with ambulance work, and rendering the first aid to the sick or injured. The police, who had hitherto attended the classes, were reported by Sir E. Henderson to have evinced great interest in the course and marked ability to grasp the subjects taught.

On Wednesday, petitions against the Vaccination Acts Amendment Bill were presented from the Royal College of Surgeons, Ireland, from the Forfarshire Medical Association, and from Cambridge and Prescot.—The second reading of Mr. Dillwyn's Lunacy Law Amendment Bill was again deferred for a week.—Nearly all the time of the House is now occupied by Irish debates. Mr. Parnell, as leader of the "active party," has too much to do to attend Committees, and he was to-day discharged from further attendance on the London Water Supply Committee; Mr. Maurice Brooks, one of the moderate Irish members, being appointed in his place.—The Births and Deaths Registration (Ireland) Bill was read the third time and passed.

The Vaccination Acts Amendment Bill stood for second reading on Thursday evening, but inasmuch as the Irish Disturbance, Budget, and Hares and Rabbits Bills were before it, a further adjournment was, of course, inevitable.—The same remark applies to the completion of the Select Committee on the Contagious Diseases Acts, which has been on the Order Book for some days. Mr. Childers proposes to substitute Mr. Massey for Mr. Brassey, who was put on the list by mistake, and Mr. Puleston will move that Dr. Farquharson be added to the Committee, which Sir Harcourt Johnstone will oppose.—Sir H. D. Wolff put another question as to the practice of sending pauper lunatics home from India, and the Marquis of Hartington said he was making inquiry into the matter.—Mr. Hanbury Tracy had a question on the paper as to compensation for officers for injuries sustained on torpedo service, but it was deferred.—Mr. Storer interrogated the Home Secretary with regard to the infliction of fines, amounting to £9, for ear-marking cattle at Bedale, in Yorkshire. Sir W. Harcourt postponed the answer until he had had time to obtain information, and elicited a loud cheer by suggesting that all complaints against magistrates should first be addressed to him privately at the Home Office.—Dr. Lyons asked the Chief Secretary to the Lord Lieutenant of Ireland whether it is true that trained nurses skilled in the management of fever have been supplied by the Hardwicke Fever Hospital, Dublin, to take charge of the fever cases at Swinford at the request of the Local Government Board, Ireland, and whether it is true that up to the present date there has been no report of the occurrence of purpura hæmorrhagica as a complication of the fever now prevailing in the west of Ireland. Mr. Forster replied in the affirmative to both questions. Two trained nurses had been secured, and the complication that was represented by two words which he would not venture to pronounce had not yet appeared. The right honourable gentleman added that there was reason to hope, from information he had received, that the fever was abating. The guardians had been instructed to obtain the services of nurses, where required, and to take such steps as might be possible to put the people's houses in a better sanitary condition.

QUEEN'S UNIVERSITY, IRELAND.—John T. Collier, M.D., passed the examination for the degree of Master in Surgery, but was absent at the conferring of the degrees.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the last meeting of the Council the following Member was elected a Fellow of the College:—

Haward, Edwin, M.D. Edin., M.R.C.P. Lond., Harley-street; diploma of membership dated Feb. 3rd, 1837.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 9th, 12th, 13th, and 14th inst.:—

Ernest A. White, Ernest H. Simmons, Henry W. Hooper, John U. Bolton, Sidney Davies, Harry A. Francis, John L. Stretton, and John H. Harris, St. Bartholomew's Hospital; William Wilson, Samuel B. A. Edsall, Albert Green, William D. Smallpiece, Edward S. Tresidder, Albert S. Topham, Edward W. Roberts, Arthur L. Fireman, Edward O. Newland, Alfred M. Sutton, Francis G. F. Chittenden, and John H. Greenway, Guy's Hospital; Cecil M. Hendriks, Alexander I. Grant, Charles O. Fowler, Harry Harlock, Henry J. Harries, Edward H. Tenison, Percy F. Money, Edward O. Croft, Walter F. Scott, James W. Draper, Mohamed J. Khan, William H. Horsman, Robert W. Watson, Wilmot H. Evans, William H. Tomlins, and Charles L. Ashby, University College; George Greenwood, John H. Williams, Charles M. Chadwick, William A. Norry, Charles J. Dabbs, and E. Aslamian, London Hospital; Montagu W. Williams and William Davies, Middlesex Hospital; Thomas R. Rogers, Charing-cross Hospital; Mark Style, St. Mary's Hospital; James E. Kershaw and Frederick W. S. Stone, St. Thomas's Hospital; George R. Bloxam, St. George's Hospital; Richard H. Botham, King's College; Edward T. Collins, Middlesex Hospital; James F. Saunders, Guy's Hospital.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 8th:—

Knight, Alfred Osborne, Tewkesbury, Gloucestershire.
Villanova, Francis Horton, Southampton-row.

The following gentlemen also on the same day passed the Primary Professional Examination:—

K. R. Divecha, Grant Medical College, Bombay; Daniel Thurston, London Hospital; Gilbert Thomas Smith, St. Bartholomew's Hospital; John Cornelius Garmon, Edinburgh Infirmary.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentleman was admitted a Fellow of the College on the 3rd inst:—

Hamilton, John, L.R.C.P. Edin., Swadlincote, Burton-on-Trent.

DR. BUZZARD has been elected an Honorary Fellow of King's College, London.

JAMES RUSSELL, M.D., has been placed on the Commission of the Peace for Birmingham.

ST. MARK'S OPHTHALMIC HOSPITAL, DUBLIN.—A portrait of the late Dr. Ramsford, Senior Surgeon to this institution, has been presented by a near relative.

AT the quarterly meeting on the 14th instant of the Directors of the Naval Medical Supplemental Fund, Dr. H. J. Domville, C.B., M.D., Inspector General, in the chair, the sum of £65 was distributed among the several applicants.

DUBLIN ORTHOPÆDIC HOSPITAL.—Her Excellency the Countess Cowper visited this institution last week, and, expressing herself much pleased with the manner in which it was conducted, distributed a quantity of choice flowers amongst the inmates.

VACCINATION GRANTS.—The following gentlemen have received Government grants for efficient vaccination in their respective districts:—Mr. William Smith, Redditch District of the Bromsgrove Union (third time); Mr. Beaven Rake, No. 2 District of the Fordingbridge Union (third time); Dr. W. Hoffmeister of Cowes, Isle of White District (third time in succession).

BEQUESTS ETC. TO MEDICAL CHARITIES.—Mr. Thomas Gray, of Willow Bank, bequeathed £100 to the General Infirmary; £100 to the Hospital for Women, and £50 to the Public Hospital and Dispensary, all at Sheffield. The Middlesex Hospital has received £210, the amount realised by a performance of the Inseparables Amateur Dramatic Club at the St. James's Theatre. Mr. Henry Levy Keeling, of Albany-terrace, Regent's-park, bequeathed £100 each to the London Hospital and the Metropolitan Free Hospital. Mr. Charles Montague Chester bequeathed £100 to the Samaritan Free Hospital for Women and Children. The Cordwainers' Company have given a third twenty guineas to the Asylum for Idiots, Earlswood, near Redhill.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ANNINGSON, B., M.D., M.R.C.S.E., has been re-elected Medical Officer of Health for the Chesterton District.

BATTYE, J. H., M.D., M.R.C.S.E., L.R.C.P.L., has been appointed Third Attending Medical Officer to the Provident Medical Institution, Pimlico-road, vice J. J. Sewell, retired.

BRISCOE, W. T., A.B., M.B., & M.Ch., has been reappointed Medical Officer of Health for the Chippenham Union Dirtrict.

CONSTABLE, J., M.D., C.M., has been appointed Medical Officer and Vaccinator for the Parish of Logie, Fifeshire, vice Dr. J. W. R. Mackie, deceased.

DUNLOP, J., M.B., C.M., has been appointed Assistant Medical Officer to the Woodilee Asylum, Lenzie, near Glasgow.

EDMOND, G. M., M.A., M.D., has been appointed Medical Officer of Health for Dunottar, at a salary of £10 per annum, vice J. T. Thom, M.D., deceased.

GOUDE, H., F.R.C.S.Ed., M.R.C.S.E., L.S.A.L., has been appointed Resident Surgeon to the Small-pox and Vaccination Hospital, Highgate-hill, vice F. W. Strugnell, resigned.

HARRISON, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health to the Braintree Union, for one year.

HASLETT, J. C., M.D., M.Ch., L.A.H.D., has been appointed an Honorary Physician to the Ulster Hospital for Children, Belfast.

JONES, J. R., M.B., L.R.C.P.L., has been appointed House-Physician to the Hospital for Women, Soho-square, vice J. H. H. Bottrell.

JONES, R. R., M.R.C.S.E., has been elected a Junior House-Surgeon to the Newcastle Infirmary, vice Dr. Dodd, resigned.

MORRIS, J. W., L.R.C.P.L., M.R.C.S.E., has been re-elected Medical Officer for the Llannon District.

SPOFFORTH, J., M.R.C.S.E., L.R.C.P., has been elected Honorary Surgeon to the Kidderminster Infirmary.

WILLIAMS, W. R., L.R.C.P.L., M.R.C.S.E., has been appointed Senior House-Surgeon to the Wigan Royal Infirmary.

Births, Marriages, and Deaths.

BIRTHS.

EDIS.—On the 13th inst., at 22, Wimpole-street, the wife of W. Edis, M.D., F.R.C.P., of twins (both girls).

HILL.—On the 7th inst., at Earl's Court-road, the wife of T. Wood Hill, Surgeon, of a daughter.

HOPKINS.—On the 7th inst., at Kingswear, Sutton, Surrey, the wife of Surgeon-Major Nathaniel Hopkins, I.M.D., of a daughter.

MADELEY.—On the 4th inst., at The Quadrant, Coventry, the wife of Staff-Surgeon G. H. Madeley, H.M.S. *Albatross*, of a son.

PARSONS.—On the 6th inst., at 13, Whitworth-road, South Norwood, the wife of H. Franklin Parsons, M.D., of H.M.'s Local Government Board, of a daughter.

RAHILLY.—On the 12th ult., at Secunderabad, Deccan, India, the wife of Surgeon-Major J. Roche Rahilly, M.D., 12th Royal Lancers, of a son.

WEBB.—On the 7th inst., at Gibraltar, the wife of Brigade-Surgeon W. M. Webb, Army Medical Department, of a son.

MARRIAGES.

FRIKART—MCDONOGH.—On the 7th inst., at Zofingen, Canton Aargau, Switzerland, Emil Frikart, M.D., only son of the late Emil Frikart, J. P., of Zofingen, to Eliza Foster McDonogh, M.D., L.K.Q.C.P.I., daughter of John McDonogh, Surgeon, of Clapham, London. No cards.

HOLMES—HAMILTON.—On the 6th inst., at Hamilton House, by the Rev. Joseph Corkey, M.A., LL.B., assisted by the Rev. George Magill, M.A., Dr. Henry Holmes, of Brookview, co. Tyrone, son of the late John Holmes, Esq., J.P., of Strandabrosny, co. Tyrone, to Charlotte Amy, youngest daughter of W. J. Hamilton, Esq., M.D., Fleet-Surgeon, R.N., of Hamilton House, Londonderry. (No cards. At home after Aug. 8th.)

ROUGHTON — ROBINSON. — On the 1st inst., at the Parish Church, Streatham, by the Rev. T. T. Griffith, Rector of Seale, assisted by the Rev. W. C. Roughton, Vicar of Great Harrowden, Northamptonshire, and the Rev. J. R. Nicholl, Rector of Streatham, James Woolley Roughton, M.R.C.S.E., L.R.C.P., of Streatham-common, third son of James John Roughton, Esq., of Kettering, to Frances Mary, eldest daughter of Aug. O. Robinson, Esq., of Greta House, Streatham.

STEVENS—BERGH.—On the 3rd ult., at Robertson, South Africa, by the Rev. A. MacGregor, Lewis William Stevens, L.R.C.P. & M.R.C.S.E., to Jesse Wilhelmina Bergh, youngest daughter of the late Oloff M. Bergh, Esq., of Cape Town.

DEATHS.

FLUKER.—On the 19th ult., at Mussorie, from the effects of sunstroke, William Henry Fluker, of the Bank of Bengal, eldest surviving son of Robert Carr Fluker, M.D., J.P., of Berwick-upon-Tweed, in the 34th year of his age.

GWYNN.—On the 11th inst., at New-street, Wem, Salop (very suddenly), Samuel Betton Gwynn, F.R.C.S.E., aged 57.

SPENCER. — On the 2nd inst., at his residence, 9, Winckley-square, Preston, Lawrence Wilson Spencer, L.R.C.P., M.R.C.S.E., Medical Officer of Health to the Rural Sanitary Authority, youngest son of the late Lawrence C. Spencer, M.D., J.P., aged 29.

WARD.—On the 10th inst., at 28, Finsbury-circus, Stephen Henry Ward, M.B., M.D., F.R.C.P., aged 61.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, July 15th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 9	29·75	W.	61	56	106	69	52	0·52	Cloudy
,, 10	29·89	W.	59	55	102	68	52	0·13	Cloudy
,, 11	29·97	W.	60	56	107	72	53	0·11	Cloudy
,, 12	30·21	W.	63	57	99	72	53	0·24	Overcast
,, 13	30·17	W S W	63	58	102	73	55	..	Overcast
,, 14	30·07	S.S.E.	63	60	109	74	56	0·11	Cloudy
,, 15	29·89	E.	64	62	..	69	58	0·44	Overcast

Notes, Short Comments, and Answers to Correspondents.

PAUL BROCA.

A SPECIAL memoir of the life and work of Paul Broca—whose death on the night of Thursday, the 8th inst., we deeply regret to announce—is crowded out, with many other matters of interest, by the report of the proceedings of the Medical Council. The obituary will appear next week.

A. E.—We cannot counsel any young man to enter the profession who has not private means at his disposal.

J. W. R.—See THE LANCET, March 27th, page 477.

SCURVY IN CIVIL PRACTICE.

To the Editor of THE LANCET.

SIR,—I read with interest the cases of Scurvy in Civil Practice by Dr. Eade, recorded in THE LANCET of June 26th. One example of that disease came under my observation many years ago, which may also have some interest.

On the 17th December, 1863, I was requested to see a farmer in good circumstances, aged about forty-five, who was said to be dying of cancer of the stomach. In addition to the stomach disease—which was in an advanced stage, and had occasioned a very restricted diet,—he was scorbutic to a degree which had made him bedridden and helpless. His legs were swollen, purple in colour, and so stiff as to be perfectly useless. Under change of diet, and lemon-juice in effervescence with bicarbonate of potash, the man recovered from the scurvy in a few weeks, and was able to leave his bed. He died of stomach disease on the 13th of April, 1864, nearly four months after I first saw him.

Although I had opportunities, more than thirty years ago, for watching the results of scurvy in seamen who were carried into hospital from vessels engaged in the whale fishery, I do not remember to have seen a better illustration of the disease than that which I have now briefly described.

Yours obediently,

Kington, Herefordshire, July 2nd, 1880. G. S. GARRARD.

THE HOLLOWAY MURDER.

MR. SIDNEY SMITH, the Governor of Newgate, on Wednesday last received a communication from the Home Office, announcing Her Majesty's pleasure that the capital sentence passed upon James Sweetland for murder should be respited. The execution was to have taken place on Monday, the 20th inst. Probably the sentence will be commuted to penal servitude for life. The official notification was received at 5 P.M., and was at once made known to the prisoner, who received it with much emotion.

Nec temere nec timide.—Address the inquiry to the Dean of the Medical Faculty of the University of Durham.

SCURF IN RINGWORM.

To the Editor of THE LANCET.

SIR,—Can any of your numerous readers recommend a cure for scurf left after an inveterate case of ringworm of the scalp? Two healthy children (brothers) have been under treatment for eighteen months. The one had the patches covered thickly with scurf; the other has been almost free from it. Now the hair is quite long and healthy, and no fungi can be detected under the microscope. Several applications, as sulphur and white precipitate ointment, clear the scurf entirely away; but in the course of a few days after discontinuing them it reappears, not only on the spots formerly diseased, but for some distance around them. As nothing is said on this point in the interesting papers on Ringworm which have recently appeared in your journal, I should be greatly obliged to hear of a remedy.

Yours &c.,

July 6th, 1880. M.D.

W. M.—Foreigners, desirous of practising medicine in Spain and her colonies, require to have a University Spanish diploma, and their own titles and qualifications must be previously verified before a Spanish Consul.

ROTHERHITHE.

SANITARY matters, as concern the medical officer of health's and inspector of nuisances' departments, appear to be working with some friction in Rotherhithe. At a recent meeting of the vestry, a question was raised as to the body of a child, dead from scarlet fever, having been suffered to remain several days in a room occupied by four persons, after the fact of the death had become known to the inspector of nuisances. The inspector imputed blame to the medical officer of health in the matter, but he appears simply to have made it evident that he was not working well together with that officer. The medical officer of health does not seem to have been called upon for an explanation.

Mr. W. Todd Patterson.—The information required will be best obtained from the Regulations, a copy of which may be procured from the College. Apply to the Secretary.

REGISTRATION OF DISEASES IN HOSPITALS.

To the Editor of THE LANCET.

SIR,—I am glad to observe that in THE LANCET of July 3rd you draw attention to the subject of the Registration of Diseases in Hospitals, and I hope that the prominence you have given to the matter will lead to united measures being adopted for the development of this somewhat neglected branch of hospital work. Your correspondent, Mr. Howlett, justly remarks that a very vast amount of scientific material is lost and dissipated under the present mode of registration, and suggests that a uniform system of recording cases should be adopted at all hospitals. I am sure that all interested in the subject will fully agree both with the remark and the suggestion. But although I am convinced that a uniform system of registration is not only desirable, but an absolute necessity, I do not think that any such system could remedy either the whole or even a part of the present imperfections one must own exist in our hospital registers.

A definite system applied to the registration of diseases would render the clerical element in such registration certainly simple, possibly perfect, and undoubtedly give to the records a much more extended field of usefulness; but registration, I take it, deals not only with the arrangement of the material, but also with the character and quality of the material arranged. Imperfect facts, incomplete observations, and ill-recorded cases are more serious defects in registration than any flaws in the mere arrangement of the material. Indeed, the basis of all registration depends upon note-taking, and the more excellent the note-taking the more valuable the register, in spite of the fact that, from lack of some definite method of arrangement, the materials may not be so readily accessible as they ought to be. The simple arrangement and tabulation of acquired facts is under the sole control of one individual, the registrar, and for him to adopt a particular system in his arrangement would be no difficult proceeding; but the collecting of these facts is a matter less under control, less easy to influence, and yet no less in importance, and, while it forms the backbone of the register, can still be but little, if at all, affected by any system of registration, however excellent or precise. I would not for one moment underrate the great importance of a uniform system of record-keeping, as ably advocated in your columns; but if reform is to take place in the registration of diseases in hospitals, I fancy it is most required in the department of note-taking, and not the less because that department occupies a definite educational position. Difficulties in the matter of note-taking have probably presented themselves to most registrars, and I have no doubt that many have found that, however elaborate their system of recording those notes might be, such system does not insure with certainty excellence of quality in the matter recorded. As Mr. Howlett states, the notes of the cases are in most instances taken either by the registrar himself or by the students. The objections to note-taking by the registrar alone, are serious and well founded. In the first place, in most hospitals the extent of the work is such as to render it impossible for one man, or even for two, to carry it out in any way effectually, and, moreover, the registrar would very constantly lose the great advantage possessed by the dresser—namely, that of seeing the cases on their admission, and of participating in their immediate and subsequent treatment. Under any circumstances, details of a case obtained at second-hand may be regarded as less valuable than notes made actually on the spot. But, in the second place, the registrar, by undertaking such work, would deprive the student of a most valuable educational means; for although note-taking may involve a great deal of monotony, it at least involves the practice of accurate and repeated observations, the habit of arranging and criticising facts, and, not least, the faculty of expressing the matter observed in terms of precision. The encouragement and development of note-taking as an educational aid may, I believe, in many instances be considerably extended without disadvantage. On the other hand, if note-taking be entrusted solely to the dressers or clinical clerks, the value of the material noted is likely to suffer both in quality and amount, and it becomes at once obvious that such note-taking will be practically useless unless conducted under constant supervision, and here one is confronted with the great difficulty in the case. Allowed that the notes of cases should be taken by students, that such note-taking is of great educational advantage to them, and that without supervision its advantages is minimised, and the question naturally presents itself, By whom should such supervision be exercised? I think most certainly by the registrar. To expect the complete and systematic supervision that would be required from the proper conduct of the work from the staff of a hospital is unreasonable. It would be almost impossible, even if considered advisable, for a surgeon or physician to go into the details of the notes of every case under his care every time he visited the wards. His general interest in note-taking, and his known determination to have it properly carried out, would be of the greatest influence with students, and, moreover, the habit of dictating special notes and the details of examinations of cases, as practised by many hospital surgeons and physicians, supply the register with its most valuable information. It is obvious that the more interest and the more active part the members of a staff take in note-recording, the more valuable will these notes become; but in the routine work of case-taking, in the minor details it involves, and in the supervision of any particular system of recording observations, they cannot be expected to take a constant part. How this supervision is to be conducted is a matter of difficulty, and it is upon this point that I think expressions of opinion are needed. Mr. Howlett considers it likely to prove a "superhuman labour." I would, therefore, wish to detail the method of exercising supervision I adopted during the time I held the post of surgical registrar at the London Hospital, and I think it will be seen that such a system is practicable, that it tends to promote the first interests of registration, and at the same time does not involve any superhuman labour. The ward notes at the London Hospital are taken upon loose sheets of paper fixed to a board by means of elastic, this arrangement allowing of their being readily bound at the end of the year. The dressers are supplied with a form for note-taking, compiled by my predecessor, and with diagram figures, if necessary, for marking the position of fractures &c. The notes are supposed to be taken according to the form supplied. The supervision required involved an examination of all the notes in the surgical wards two or three times a week; a mark affixed at each visit prevented the misfortune of reading the same notes twice. Where any defects were observed in the notes, the first difficulty was to communicate the fact to the dresser, who probably was not on the spot. This difficulty was easily overcome by the use of slips of conspicuous red paper, with a printed heading stating their source, and upon these slips any defects in the notes were written. These slips affixed to the bed-board were too conspicuous to be overlooked by the dresser, who on seeing the case would correct the defect in the manner advised. This plan I found answered very well, and would enable a registrar to compile notes upon any arranged plan. At the same time it is necessary that the staff and governing body should be interested in the matter of note-taking, or else the difficulty of enforcing rules of any kind becomes considerable. At the London Hospital this interest is vigorously expressed both by the staff and the house committee, and has been the chief means of greatly improving the whole aspect of registration at that place.

Finally, I hope that, now the subject has been broached, fresh interest will be aroused in the work of registrars, and that, if reform is to be made, attention will be directed in the first instance to the source of registration—note-taking.

I remain, Sir, yours faithfully,

FREDERICK TREVES, F.R.C.S.,

July, 1880. Assistant-Surgeon to the London Hospital.

Surgeon-Major complains of an evil which must occur in all branches of the service—occasional slowness of promotion. It is quite impossible that all executive officers can obtain promotion to the administrative grades, or all deputy surgeons-general to the rank of surgeon-general. The late Government did a great deal to diminish the hardship of this by the creation of the grade of brigade surgeon, and by making the age of retirement for administrative officers 60 instead of 65. We do not see that any good would be gained by the publication of our correspondent's letter. In a few years we shall probably see promotion much more rapid. To make promotion flow at a steady pace in any branch of the public service is a problem which has not yet been solved, nor has our correspondent suggested any means by which this could be accomplished.

THE USE OF THE HOT VAGINAL DOUCHE.

To the Editor of THE LANCET.

SIR,—In reference to the use of the hot vaginal douche in your issue of July 3rd, I may mention that I have employed it with great advantage in two or three cases of rigid os, acting according to suggestions made by a correspondent in your journal some time ago. At the same time the mess made, in spite of every care, and the discomfort to the patient caused by the wetting of the bedclothes &c., constitutes a great obstacle to its satisfactory employment.

Perhaps some of your readers may be able to offer some advice on the subject.

I am, Sir, yours &c.,

Meadowside, Putney, July 6th, 1880. G. STANLEY MURRAY, M.D.

THE COST OF SCHOOL BOARD CERTIFICATES.

THE following extract is taken from the *Catholic Times* of July 2nd:—

"Mr. John Flagg, M.P., has received a letter from the Educational Department, stating that whenever a medical certificate is required by School Boards, in explanation of the absence of a child from school, the cost of the certificate should be defrayed by the Boards themselves. Parents would do well to bear this fact in mind."

A. M. V.—Our correspondent had better let his solicitor write to the Company, requiring removal.

SIR ANTHONY CARLISLE.

THE Council of the College of Surgeons has just acquired, by purchase at Christie and Manson's, the fine portrait painted by Sir Martin Archer Shee, President of the Royal Academy, of Sir Anthony Carlisle, who was elected President of the College in 1828, and again in 1837. It was engraved for Pettigrew's Medical Portrait Gallery.

"CRUELTY TO WOMEN."

To the Editor of THE LANCET.

SIR,—The efforts which you are making to render the work of the young women in drapery establishments less irksome and deleterious to them induce me to call your attention to the fact that ill health among this class is not wholly dependent upon hard work and bad treatment. Fashion has a great influence with these women, it may almost be considered a part of their business, and tight stays and wretchedly misshapen boots not only interfere materially with their powers of locomotion, but seriously impair their general health. The overwork and bad treatment to which you refer occur probably only in the second- and third-class shops; for in the leading establishments I have reason for believing that the principals take care of the women in their employ, and that the latter are perfectly satisfied with the treatment they receive. You are, doubtless, well acquainted with the various disorders produced by deformed boots and tight stays; but you possibly may have overlooked the important part they take in the ailments of the class under consideration.

There are other occupations for women which are probably quite as unhealthy in their nature as that of drapery houses, but few where so much attempt at fashionable dressing takes place.

I am, Sir, yours faithfully,

Queen Anne-street, July 6th, 1880. E. NOBLE SMITH.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Poore, London; Dr. Duffin, London; Mr. T. Smith, London; Mr. Propert, London; Mr. Sydney Jones, London; Dr. Grainger Stewart, Edinburgh; Dr. Duckworth, London; Mr. Bader, London; Mr. Gamgee, Birmingham; Mr. Spoffath; Dr. Slade King, Ilfracombe; Mr. Carter, Leighton Buzzard; Mr. Barclay, Birmingham; Mr. Parry, Liverpool; Dr. Coombe, Castle Cary; Mr. Holmes, Limerick; Mr. Carter, Ramsgate; Messrs. Holbrook and Son, Portsmouth; Dr. Massey, Nottingham; Mr. H. Elliott, Bristol; Mr. Souter, London; Mr. Banargee, Allahabad; Mr. Roberts, Manchester; Mr. A. G. Brown, London; Mr. Ingpen, London; Mr. Benham, London; Mr. Rivington, London; Messrs. Lynch and Co., London; Messrs. Marriett, London; Dr. Stuart, Edinburgh; Dr. Churton, Leeds; Dr. Swann, Batley; Mr. Constable, Leuchars; Dr. M'Lean, Netley; Messrs. Baker and Sons, Dublin; Mr. Tabener, Wigan; Messrs. Byles, Bradford; Mr. Rutherford, Newcastle; Messrs. Lawrie and Co., London; Messrs. Burgoyne and Co., London; Messrs. J. and A. Churchill, London; Mr. E. Clarke, Hampstead; Dr. Page, London; Mr. Jukes, Dera Ghazikan; Dr. Haslett, Belfast; Dr. Lewinson, Newcastle-on-Tyne; Messrs. Fraser Brothers, London; Mr. Denny, Blackwater; Mr. Little, Kiel; Mr. Whitehead, London; Mr. Taylor, Warwick, Queensland; Dr. Temple, Hatcham; Mr. Gray, Ottery St. Mary; Mr. Walsh, Chester; Dr. Turle, Finchley; Dr. Steele, London; Dr. Collier, Scarborough; Mr. Smiles, London; Mr. Hamilton, Swadlincote; Mr. Anderson, Edinburgh; Dr. Stewart, West Hartlepool; Mr. Anderson, Edinburgh; Dr. Dunlop, Melrose; Mr. Townsend, Exeter; Mr. Venman, London; Mr. Goode, London; Mr. Boyce, Shrewsbury; Dr. Gale, Manchester; Dr. Lyon, Thatcham; Dr. Bradford, Smethwick; Mr. Vance, West Brighton; Dr. Diamond, Brixton; Dr. Gairdner, Glasgow; Mr. Curtice, Sydenham; Mr. Rake, Fordingbridge; Mr. Patterson, Kingsland; Mr. Adcock, Bermondsey; Dr. Tatham; Dr. Farquharson, London; Mr. Collier, London; Mr. Horsley, Croydon; Mr. Holmes; Dr. Hoffmeister, Cowes; Mr. Alliott, Sevenoaks; Mr. Workman, Reading; Dr. J. R. Jones; Dr. Williams, Enfield; Sir Gilbert Lewis, Kington; Dr. W. H. White, London; Mr. Goude, Holloway; M R.C.P.E.; Constant Subscriber; C. D. V., Leeds; P. H. R.; B. M.; A. B., London; Medicus; B. A.; A. Z.; An Old Subscriber; O. S.; J. W. R., Ellesmere; S. J.; A. M. Y.; Candidate; A Correspondent; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Astley, Dover; Messrs. Braidey and Martin, Newcastle-on-Tyne; Dr. Roe, Patricroft; Dr. Edis, London; Messrs. Keith and Co., Edinburgh; Mr. Badger, Penicuick; Dr. Coates, Salisbury; Dr. Taylor, Cheltenham; Mr. Roberts, Thatcham; Mr. Sweetapple, Reigate; Mr. Gardner, Portsea; Mr. Harding, Finchley; Mr. Medley, Oxton; Mr. Heywood, Rochester; Dr. Robinson, Dukinfield; Mr. Crowley, Sheffield; Mr. Jones, Dowlais; Mr. Woodcock, Bradford; Messrs. Christy and Co., London; Mr. Cox, Williton; Mr. Jeffries, Chesterfield; Dr. Gibbons, Cape Colony; Mr. Nichol; Mr. Huggins, Melbourne; Mrs. Smith, Hythe; Mr. Wilson, Yoxall; Mr. Stilliard, Birmingham; Mr. Abbott, Sheffield; Messrs. Ecleson and Co., Kent-road; Dr. Franklyn, London; Mr. De Fraine; Mr. Luideman, Hammersmith; Mr. Burchell, Kingsland; Mr. Goode, London; Mr. Wilson, Eastbourne; Dr. Colmer, Yeovil; Mr. Corbett; Dr. King, Ilfracombe; House-Surgeon, Halifax; M. A.; L. A. G., Hackney; B. C. L., Norwood; P. W.; Pinsium; O. J.; X., Macclesfield; G. F.; Sussex; M. B., Manchester; Medicus, Cardigan; M. O. H.; M.R.C.S., London; W., Dublin; H. W.; F. B.; M.D., Kennington; Medicus, Cashel; Epsilon; A. B. C.; Omega; Statim, Peckham; H., Basingstoke; Alpha, Wandsworth; L. M., Edinburgh; &c.

L'Union Médicale d'Orient, Liverpool Daily Post, Bristol Mercury, Age, Le Réveil Médical, Manchester Guardian, Scientific Review, Welshman, National Board of Health Bulletin, Chelmsford Chronicle, Cambridge Chronicle, Bucks Herald, &c. &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

Tuesday, July 20.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 21.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.

Thursday, July 22.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

Friday, July 23.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Annual Meeting.

Saturday, July 24.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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The above Scale of Charges is arranged upon the basis of the classification adopted in the Index.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements (on page 2), which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom.

The postal arrangements relating to the distribution of THE LANCET will be considered from time to time in the interests of subscribers.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.